

Forest Service

Southwestern Region

May 2009



# **Eligibility Report for** the National Wild and **Scenic River System**

**Apache-Sitgreaves National Forests** 

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# Eligibility Report for the National Wild and Scenic Rivers System

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Introduction	
Summary of Major Changes to the 1993 Eligibility Evaluations	
Little Colorado River Basin	
Salt River Basin	
Upper Gila River Basin	
Document Notes	
Eligibility Evaluations	
LITTLE COLORADO RIVER BASIN	
Willow Creek	
Woods Canyon/Chevelon Creek	
West Fork Little Colorado River	
East Fork Little Colorado River	
South Fork Little Colorado River	
SALT RIVER BASIN	
Bear Wallow Creek	
Black River	
West Fork Black River.	
East Fork Black River	
North Fork East Fork Black River	
Fish Creek	
UPPER GILA RIVER BASIN	
Campbell Blue Creek	
Blue River	
KP Creek	
Little Blue Creek	
Turkey Creek	
Pigeon Creek	
San Francisco River	
Coal Creek	
Dix Creek	
Sardine Creek	
East Eagle Creek	
Eagle Creek	
Appendices	
Appendix A - Regional Forester Memo	
Appendix B - Forest Service Handbook guidance	
Appendix C - Summary Form for Wild and Scenic River Eligibility Status	
Appendix D - Wild and Scenic River Inventory Documentation	
Appendix E - Ineligible Rivers	
Willow Springs Canyon	
Home Creek	
Chitty Creek	

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#### Introduction

#### **BACKGROUND**

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

Rivers may be designated by Congress or, if certain requirements are met, the Secretary of the Interior. Each river is administered by either a federal or state agency. Designated segments need not include the entire river and may include tributaries. For federally-administered rivers, the designated boundaries generally average one-quarter mile on either bank in the lower 48 states and one-half mile on rivers outside national parks in Alaska in order to protect river-related values.

Rivers are classified as wild, scenic, or recreational.

- Wild rivers Those rivers or sections of rivers that are free of impoundments and generally
  inaccessible except by trail, with watersheds or shorelines essentially primitive and waters
  unpolluted. These represent vestiges of primitive America.
- Scenic rivers Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- Recreational rivers Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

The 1987 Apache-Sitgreaves National Forests (ASNFs) Plan made the following recommendations for Wild and Scenic Rivers (WSR):

Recommend the mainstem of the Black River (approximately 16 miles) from the Buffalo Crossing area to the reservation boundary . . . be designated as part of the National Wild and Scenic River System as a scenic river (p.169, electronic version).

Recommend 14 miles of the West Fork of the Black River for inclusion in the Wild and Scenic Rivers System. Recommend 7 miles for wild designation, 3 miles for scenic designation, and 4 miles for recreation designation (p. 172, electronic version). (The West Fork of the Black River runs from the confluence of the East and West Forks of the Black River near Buffalo Crossing upstream to the forest boundary just south of the Mt. Baldy Wilderness.)

Recommend Chevelon Creek for addition to the Wild and Scenic Rivers System as a Scenic River. The recommendation will include 29.9 miles of Chevelon Canyon from the confluence of Woods Canyon and Willow Canyon downstream to the forest boundary except for Chevelon Canyon Lake (p. 175, electronic version).

Study the main stem of the Blue River from its confluence with the San Francisco River upstream to its confluence with McKittrick Creek in the Blue Range Primitive Area as a candidate stream for eligibility in the Wild and Scenic River System (p. 30, electronic version).

In 1993 the Forest Service finalized the Resource Information Report, Potential Wild-Scenic-Recreational River Designation, National Forests in Arizona. This report identified 22 rivers and 374 miles as eligible for WSR designation on the ASNFs.

In 2001 the Center for Biological Diversity brought suit against the government, claiming that the Forest Service had violated the Wild and Scenic Rivers Act by failing to consider and provide protection for 57 rivers in Arizona, including those on the ASNFs. This case was heard by the District Court in Arizona (which ruled in favor of the Forest Service), appealed to the Ninth Circuit Court of Appeals (which initially ruled in favor of the plaintiffs), and then reheard by the Ninth Circuit.

On January 7, 2005, the Ninth Circuit Court of Appeals issued an amended opinion. The Ninth Circuit Court affirmed the district court's dismissal of the Center for Biological Diversity's suit for lack of standing. However, the court reversed the district court's opinion that the plaintiffs could not amend their complaint, concluding that the plaintiffs may be able to assert a claim against the Forest Service for failure to act.

In its opinion, the Court concluded that the Forest Service's 1993 Resource Information Report, prepared for the Arizona Congressional Delegation, constitutes eligibility for the 57 rivers contained in that report. Forest Service policy at FSH 1909.12, Chapter 8.12 states that management prescriptions for eligible rivers should provide the following protection:

- 1. ...free flowing characteristics cannot be modified.
- 2. Outstandingly remarkable values (ORVs) must be protected, and to the extent practicable, enhanced.
- 3. Management and development of the river and its corridor cannot be modified to the degree that eligibility or classification would be affected.

As a result of the Ninth Circuit Court of Appeals amended opinion, Regional Forester Harv Fosgren recommended that the Arizona forests update their eligibility determinations for all rivers during Forest Plan revision, because "the determinations . . . done in 1993 may no longer be an accurate measure of what rivers are eligible." (Appendix A)

Also, there is national direction (Forest Service Handbook 1909.12, Chapter 80) to include in the land management planning process a comprehensive evaluation of the potential for rivers in an administrative unit to be eligible for inclusion in the National System (Appendix B). In an internal review of the 1993 Report, it became apparent that some of the information was out-of-date (changes to the Threatened and

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<sup>&</sup>lt;sup>1</sup> The eligibility of a river for the National Wild and Scenic Rivers System is determined by applying the criteria in sections 1(b) and 2(b) of the Wild and Scenic Rivers Act of October 2, 1968 as further described in the United States Department of Agriculture and the United States Department of the Interior Guidelines for Eligibility, Classification and Management of River Areas dated September 7, 1982 (USDA-USDI Guidelines) found as Forest Service Handbook 1909.12, chapter 90. To be eligible for inclusion, a river must be free-flowing and, with its adjacent land area, possess one or more "outstandingly remarkable" values. The determination of eligibility is an assessment that does not require a decision or approval document, although the results of this inventory need to be documented as a part of the plan document or plan set of documents.

WSR Eligibility Report Introduction

Endangered species list, for example) and other information was missing, so a river eligibility update for the ASNFs was undertaken.

In August 2007, district interdisciplinary teams were requested to review the existing river eligibility information and to provide updates. They were also asked to review the list of ineligible rivers (from a draft of the 1993 Report) and to provide information on why a river is not eligible (not free-flowing or no ORVs) or why a river should be reviewed for eligibility. Updates were gathered during meetings in late August/early to mid-September 2007.

The information gathered from the districts was incorporated into the eligibility documentation for each river. Eligibility was also documented for five rivers, which had previously been found to be ineligible.

# SUMMARY OF MAJOR CHANGES TO THE 1993 ELIGIBILITY EVALUATIONS

#### LITTLE COLORADO RIVER BASIN

- Willow Creek Scenery and Geology Outstandingly Remarkable Values (ORV) were dropped. When compared to nearby river canyons, these values were not outstanding.
- Willow Springs Canyon Willow Springs Canyon is no longer eligible because there are no ORVs. When compared to other rivers in the area of comparison, the interdisciplinary team felt that the scenery was not unique and, therefore, was not an outstandingly remarkable value. Scenery was the only identified ORV.
- Woods Canyon/Chevelon Creek Chevelon Creek and Woods Canyon were combined into one evaluation because they are within the same drainage basin and the interdisciplinary team felt that the values were complimentary. The Geology ORV was dropped, because when compared to nearby canyons, this value was not outstanding. New segments were identified to accommodate facilities which cross or are within the river corridor.
- West Fork Little Colorado River Segment 2 was extended downstream. The section of Segment 3 with two fish barriers was removed because the free-flowing character of the river had been affected. The river section is no longer flowing in a natural condition and the gabion structures have modified the waterway. Another section of Segment 3, from the Government Springs trailhead/toilet to the forest boundary, was removed because its short length is not manageable as an eligible river.
- East Fork Little Colorado River The river section from the upper fish barrier downstream is no longer eligible because the two fish barriers affect the free-flowing character of the river. This river section is no longer flowing in a natural condition and the gabion structures have modified the waterway.
- South Fork Little Colorado River Scenery ORV was added. Prehistoric ORV was dropped because these resources are on state and private lands north of the forests. The river segment was extended south (upstream) to Forest Road 409. The original eligible segment was split to remove two fish barriers that affect the free-flowing character of the river. The river at these locations is no longer flowing in a natural condition and the concrete-slab structures have modified the waterway. The river north of the lower fish barrier was dropped for manageability reasons because it crosses less than 3/4 mile of Forest Service land and is not contiguous to another river segment.

#### SALT RIVER BASIN

Bear Wallow Creek - Recreation and Wildlife ORVs were added. The original river segment was split to reflect the presence of a low, naturalized fish barrier in Segment 2.

Black River - Vegetation ORV was dropped.

- West Fork Black River Historic and Vegetation ORVs were dropped. Segment 1 was extended to below Forest Road 116. The section of Segment 2 with two fish barriers removed because the free-flowing character of the river has been affected. The river section is no longer flowing in a natural condition and the gabion and concrete structures have modified the waterway. Segment 3 was dropped because there are no ORVs.
- East Fork Black River The North Fork East Fork Black River was analyzed separately. The remaining river was split into 3 segments. A portion of the original Segment 1 (now Segment 2) classification was changed from Scenic to Wild.
- North Fork East Fork Black River Segments 1 and 2 were added to the evaluation. Segment 3 was split from the East Fork Black River evaluation. Segment 3 classification was changed from Scenic to Wild.
- Fish Creek Scenery ORV was added. The original river segment was split to reflect the presence of a low, naturalized fish barrier in Segment 2.
- Home Creek Home Creek is no longer eligible because it is not free-flowing. Two dirt, gabion, and concrete fish barriers were constructed across it. It is no longer flowing in a natural condition and the structures have modified the waterway. Other river-related values are neither unique nor outstanding.

#### UPPER GILA RIVER BASIN

- Campbell Blue Creek Campbell Blue Creek has been analyzed separately from the Blue River. Wildlife and Vegetation ORVs were added.
- Blue River The Blue River was analyzed without Campbell Blue Creek. The original Segment 2, from the Smith Place to the confluence with the San Francisco River, was split into three segments. Segments 2 and 4 were reclassified as Wild. Segment 3, between the Blue River Trailhead (XXX Ranch) and ½ mile below Forest Road 475, remains Scenic.
- KP Creek Recreation, Fish, and Wildlife ORVs were added.
- Little Blue Creek Little Blue Creek was found to be eligible.
- Turkey Creek Turkey Creek was found to be eligible.
- Coal Creek Coal Creek was found to be eligible.
- Dix Creek Portions of Dix Creek were found to be eligible.
- Sardine Creek Sardine Creek was reclassified from Scenic to Wild because "The existence of a few inconspicuous structures, particularly those of historic or cultural value, at the time of study need not bar Wild classification."

Chitty Creek - Chitty Creek was found to be ineligible. Chitty Creek no longer has any ORVs because in 2007 a 1,000-year flood scoured the channel, removed the riparian vegetation and habitats, and filled the waterfall.

East Eagle Creek - East Eagle Creek was found to be eligible.

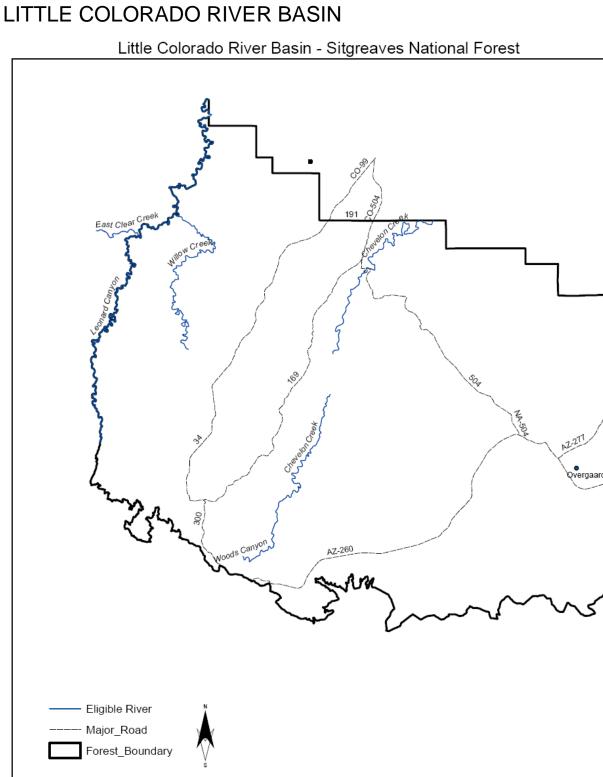
Eagle Creek - Upper Eagle Creek, from the headwaters (Dogwood Spring) south to Dry Prong Creek and south along Dry Prong Creek to East Eagle Creek, was found to be not eligible because there are no associated ORVs.

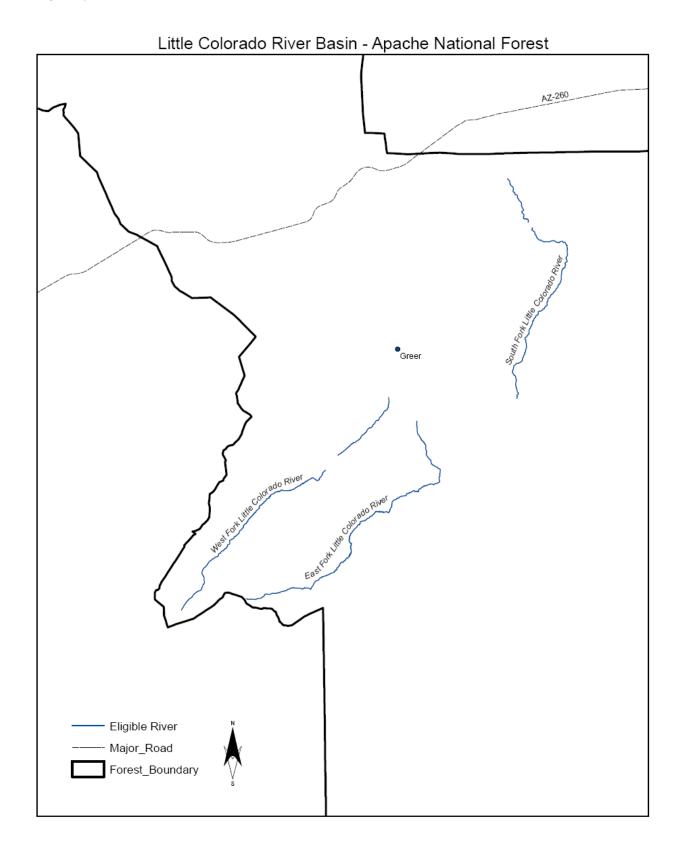
#### **DOCUMENT NOTES**

- 1. The eligibility evaluations were completed prior to development of the forest plan revision Species Diversity information. Forest and State "sensitive" species were used in the evaluations.
- 2. Rivers not previously found eligible were evaluated using the R3 Special Areas Working Group format.
- 3. The Coconino NF reconsidered Leonard Canyon and East Clear Creek, located on the western edge of the ASNFs. They found both rivers to still be eligible for Wild and Scenic River status. There were no changes to the 1993 eligibility evaluations.
- 4. The Mexican gray wolf has been reintroduced as a non-essential, experimental population under the Endangered Species Act.
- 5. The maps in this document were created with GIS. The USDA Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. Using GIS products for purposes other than those for which they were intended may yield inaccurate or misleading results. The USDA Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. These maps are not legal land line or ownership documents. Public lands are subject to change and leasing, and may have access restrictions; check with local offices. Obtain permission before entering private land.

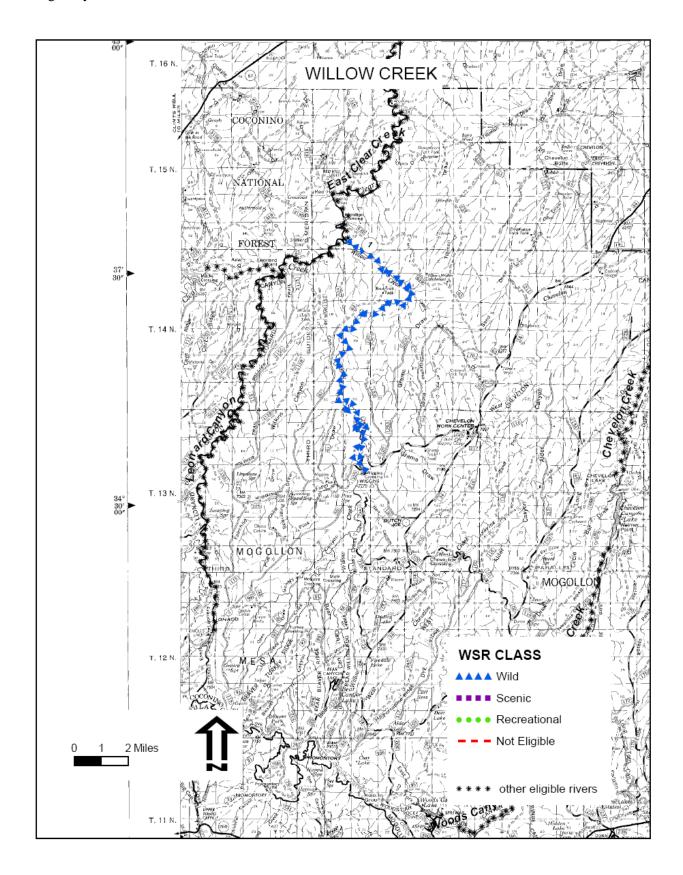
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### **Eligibility Evaluations**





# WILLOW CREEK



#### Willow Creek

Is the River free flowing?

Yes or No

Yes

**Potential Outstandingly** 

**Remarkable Values** 

Wildlife, Vegetation

**Area of Comparison** 

Sitgreaves NF

**Eligible Segment** 

One segment, from 1/4 mile north of Wiggins Crossing to the confluence

with East Clear Creek.

**Classification and Length** 

Wild, 18.9 miles Changes from previous

documents

Scenery and Geology Outstandingly Remarkable Values (ORV)

dropped. When compared to nearby river canyons, these values were not

outstanding.

Location Willow Creek flows north from the Mogollon Rim to East Clear Creek

in the extreme western portion of the Apache-Sitgreaves National

Forests.

**District** Black Mesa County Coconino

**Legal Description** Township/Range: T13N, R13E; T14N, R13E; T15N, R13E; Gila and

Salt River Meridian

#### **River-related Resources**

Scenery The canyon's simplistic beauty is based on its orange, white, and gray

sandstone and limestone components. The lush undergrowth and towering

tree canopy characterize the area's beauty.

Recreation Access to Willow Creek is by foot only. Recreation activities include

hiking, hunting, sightseeing, and limited fishing. The canyon provides a sense of remoteness and offers relief from the nearby congested and

crowded recreation areas.

Geology The geology of Willow Canyon is composed of exposed Coconino

sandstone with a Kaibab limestone cap.

**Fish** The threatened Little Colorado spinedace and the sensitive bluehead sucker

> historically occurred in Willow Creek. A proposal is being evaluated to reintroduce these species into the Willow Creek drainage. The native speckled dace and non-native brook trout and fathead minnow are found in

Willow Creek.

Wildlife Wildlife species and habitat are ORVs because the varied topographic,

edaphic, and vegetative conditions within the canyon combine with permanent water (pools) to provide habitat for numerous wildlife species.

The river segment provides habitat for threatened wildlife species including Mexican spotted owl and Chiricahua leopard frog (historic). Willow Creek canyon also provides habitat for sensitive wildlife species including bald eagle, American peregrine falcon, common black-hawk, northern goshawk, and northern leopard frog.

Common wildlife include elk, mule deer, black bear, mountain lion, coyote, wood rat, chipmunk, great horned owl, other raptors, common raven, belted kingfisher, passerine birds, and various reptiles and amphibians.

**Historic** There are no known historic resources.

**Prehistoric** Mogollon culture rock art and dwellings and Apache culture pot shards are

found along the river segment.

**Hydrology** Stream flow is intermittent with perennial pools, with the largest flows in

early spring. The stream has low turbidity levels.

**Vegetation** Vegetation is an ORV because of the diversity of species that occur

throughout the river corridor.

Dominant plant species along this river segment include ponderosa pine and narrowleaf cottonwood with other woody and herbaceous species. The canyon walls are dominated by oneseed juniper and piñon pine. Many other shrubs, forbs, and grasses are common. Mixed conifer stands occur in

north-facing, mesic pockets throughout the canyon.

**Land Ownership** All national forest.

**Transportation** Access to this section of Willow Creek is by foot only.

**Livestock Grazing** A short section of upper river segment is in the Limestone Allotment. The

remainder of the river segment is not grazed.

Past Activities Cable logging occurred in the mid-1980s in section 5, T13N, R13E and

sections 19, 29, and 31, T14N, R13E.

Special Land Uses None.

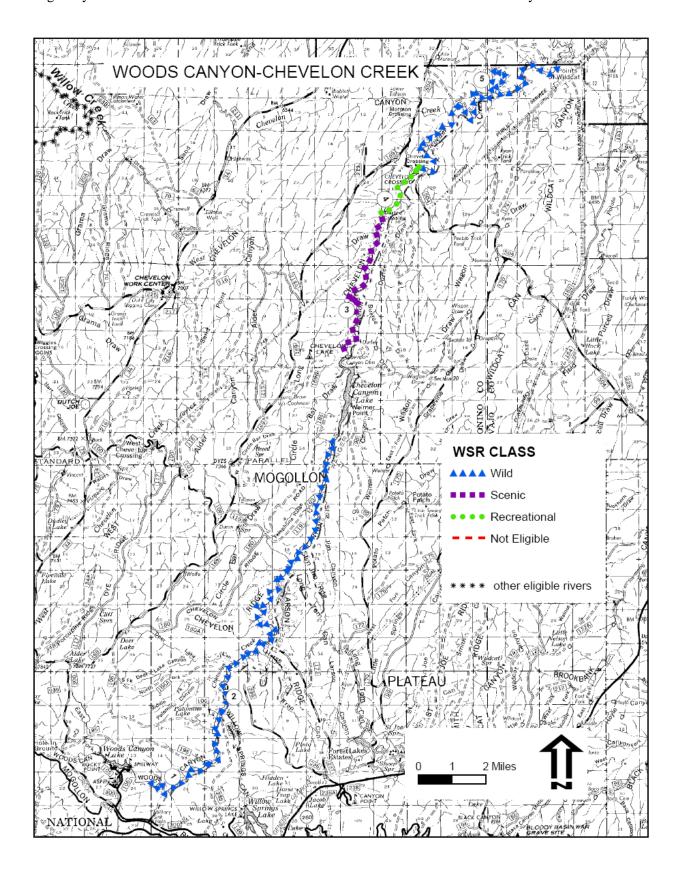
Special Management

Designations

The extreme northern portion of Willow Creek is within Leonard Canyon Inventoried Roadless Area. The river segment is within Willow Creek Special Management Area, where motor vehicle use is restricted.

Other The river segment is three hours from the Phoenix area.

# WOODS CANYON/CHEVELON CREEK



#### Woods Canyon/Chevelon Creek

Is the River free flowing?

Yes or No

Yes

Potential Outstandingly Remarkable Values

Segment 1 - Scenery, Wildlife, Vegetation Segment 2 - Scenery, Fish, Wildlife, Vegetation Segments 3-5 - Scenery, Fish, Vegetation

Area of Comparison

Sitgreaves NF

**Eligible Segments** 

Segment 1 - From one mile below Woods Canyon Lake Dam to the

confluence with Chevelon Creek.

Segment 2 - From the confluence of Woods Canyon and Chevelon Creek north to the south end of Chevelon Lake.

Creek north to the south end of Chevelon Lake.

Segment 3 - ¼ mile north of Chevelon Lake Dam to 0.1 miles above the diversion at Durfee Crossing.

diversion at Duffee Crossing.

Segment 4 - 0.1 miles above the diversion at Durfee Crossing to ¼ mile

north of the Forest Road 504 crossing

Segment 5 - 1/4 mile north of the Forest Road 504 crossing north to the

forests boundary.

**Classification and Length** 

Segment 1 - Wild, 4.9 miles Segment 2 - Wild, 12.8 miles Segment 3 - Scenic, 5.3 miles Segment 4 - Recreational, 2.4 miles Segment 5 - Wild, 10.7 miles

Changes from previous documents

Woods Canyon and Chevelon Creek were combined into one evaluation because they are within the same drainage basin and the

interdisciplinary team felt that the values were complimentary.

Geology Outstandingly Remarkable Value (ORV) was dropped because this value was not outstanding when compared to nearby river canyons.

New segments were identified to accommodate facilities which cross or are within the river corridor.

**Location** From one mile below Woods Canyon Lake Dam to the confluence of

Woods Canyon and Chevelon Creek, then north along Chevelon Creek

to the forests boundary.

District Black Mesa

Counties Coconino, Navajo

Legal Description Township/Range: T11N, R13.5E; T11N, R14E; T12N, R14E; T13N,

R14E; T14N, R14E; T14N, R15E; Gila and Salt River Meridian

#### **River-related Resources**

Scenery

Scenery is an ORV because Woods Canyon and Chevelon Creek are exemplary examples of sandstone/limestone canyons on the Sitgreaves portion of the ASNFs.

The canyon's simplistic beauty is based on its orange, white, and gray sandstone and limestone components. The lush undergrowth and towering tree canopy characterize the area's beauty. The deep V-shaped canyon is more apparent in Segments 3 through 5 as are sandstone formations and evidence of the Mogollon culture.

Recreation

Recreation opportunities include hiking, fishing, hunting, and sightseeing. In contrast to the nearby developed recreation areas, Woods Canyon and Chevelon Creek provide a sense of remoteness and offer relief from the congestion and heavily-used recreation areas. Several rugged trails access Chevelon Creek from the east and west sides of the canyon. There are no designated trails in either Segment 1 or Segment 5. The combined canyons are managed for non-motorized recreation with the exception of Chevelon Crossing, where Forest Road 504 crosses Segment 4.

The geology of Woods Canyon/Chevelon Creek is composed of exposed Coconino sandstone with a Kaibab limestone cap. Once an ocean floor, the area that is now the Mogollon Rim has gone through many changes. A fault in this area caused tremendous uplifting, raising the ground to an average

elevation of 7,500 feet.

Fish species are an ORV because diversity of native fish species.

Candidate fish species include roundtail chub. Sensitive fish species include Little Colorado sucker and bluehead sucker.

Fish species found in Segment 1 include native speckled dace and nonnative fathead minnow and rainbow, brown, and brook trout. Species found in Segments 2 through 5 include natives - speckled dace, roundtail chub, bluehead sucker, and Little Colorado sucker; and non-natives - golden shiner, fathead minnow, and brown and rainbow trout. Segment 2 has been considered as a Little Colorado spinedace reintroduction site, but the presence of non-native fish species precludes reintroduction at this time.

Geology

Fish

Wildlife

Wildlife species and habitat are ORVs because the river corridor contains important populations of threatened wildlife species and a wide diversity of habitats that supports numerous wildlife species.

Threatened wildlife species include Mexican spotted owl. The canyons provide habitat for sensitive wildlife species including bald eagle, American peregrine falcon, common black-hawk, and northern goshawk. Habitat for the threatened Chiricahua leopard frog and the sensitive northern leopard frog and California floater exists along the river, but these species are not currently found in the area.

The varied topographic, edaphic, and vegetative conditions within the canyon combine with the perennial stream and pools to provide habitat for numerous wildlife species. Common wildlife species include elk, mule deer, whitetail deer, black bear, mountain lion, coyote, javelina, wood rat, chipmunk, great horned owl, osprey, other raptors, common raven, belted kingfisher, passerine birds, and various reptiles and amphibians.

**Historic** 

There are no known historic resources.

**Prehistoric** 

Isolated hunting camps and rock art from the Mogollon culture are found in Segments 1 and 2 (Woods Canyon and Chevelon Creek south of the lake). These are rare because the higher elevations were not suitable for permanent living. As the elevation decreases to the north, remnants of daily Mogollon life become more abundant. Most apparent are dwellings, rock art, and pot shards.

Hydrology

Stream flows are mostly perennial with the largest flows in early spring. Other short segments are intermittent. Large pools are found in late summer and fall. There is a small water diversion at Durfee Crossing in Segment 4.

Vegetation

Vegetation is an ORV because diversity of plant species found within the canyon system.

The river canyon system traverses a wide variety of vegetation types. Mixed conifer stands occur in north-facing, wet pockets throughout the canyons, but especially in Woods Canyon. Vegetation on the canyon walls and rims grades from ponderosa pine forest in the south to piñon-juniper woodlands to the north. Canyon bottom trees include ponderosa pine and narrowleaf cottonwood, alder, willow, oak and boxelder. Some stringers of ponderosa pine are even found in the northern-most canyon, an unusual occurrence for this area.

The riparian vegetation lies within a steep limestone canyon.

**Land Ownership** 

All national forest.

#### **Transportation**

Segment 1 - Numerous old logging roads provide access to the top of Woods Canyon.

Segment 2 - One Eighty Trail #409 and Telephone Ridge Trail #203 provide access from the west.

Segment 3 - Chevelon Lake Trail #611 provides access from the west.

Segment 4 - Durfee Crossing Trail #408 provides access from the north.

Forest Road 504 crosses at the north end of this segment. Chevelon Crossing Trail #415 parallels Chevelon Creek for 0.7 miles upstream from Chevelon Crossing.

Segment 5 - There is no road or trail access to this segment.

#### **Livestock Grazing**

Prior to 1960, sheep accessed the river segments at the river crossings. In the late 1960s cattle were fenced out the major drainages. The Chevelon Canyon Allotment did not include any part of the canyon. Sheep are grazed in the Long Tom Allotment along the eastern edge of Segments 2 through 5.

**Past Activities** 

Timber was cable harvested in the mid-1980s above Segment 2.

**Special Land Uses** 

An Arizona Public Service Company 345 kV power line crosses the middle of Segment 3. This power line corridor has been identified in the decision for the Designation of Energy Corridors on Federal Land in the 11 Western States FEIS as 3.500 feet wide and multimodal.

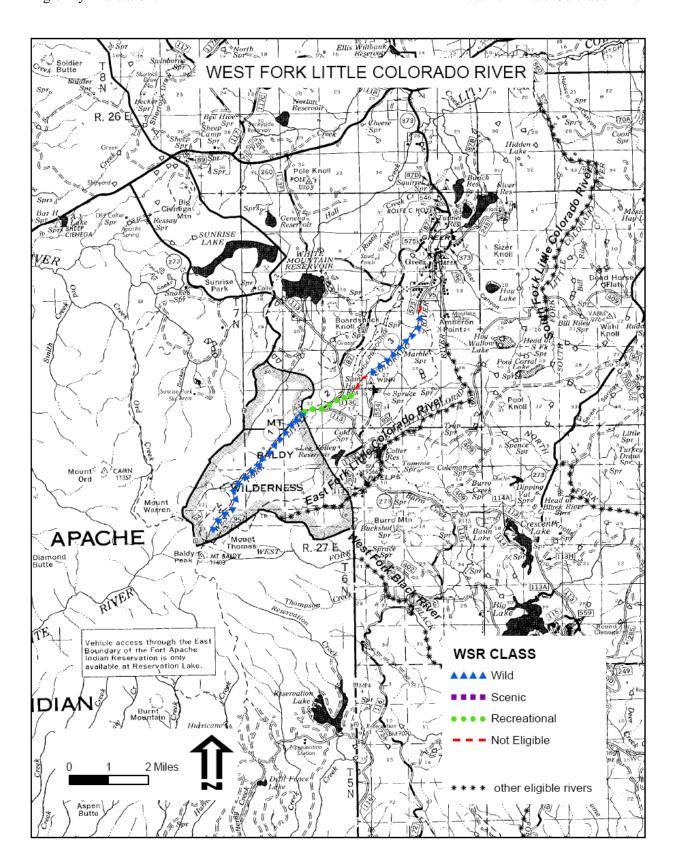
Special Management Designations

Segment 1 and most of Segment 2 are within Chevelon Canyon Inventoried Roadless Area. Segment 1 and the southern two-thirds of Segment 2 are within Rim Lakes Recreation Management Area. All river segments are within Chevelon Canyon Special Management Area, which is managed for non-motorized recreation.

Other

The southern end of the river is within two hours of the Phoenix area.

# WEST FORK LITTLE COLORADO RIVER



#### West Fork Little Colorado River

Is the River free flowing?

Yes or No

Yes

**Potential Outstandingly** 

**Remarkable Values** 

Segment 1 - Scenery, Recreation Segment 2 - Scenery, Recreation

Segment 3 - Scenery, Recreation, Wildlife

**Area of Comparison** Statewide

**Eligible Segments** Segment 1 - From the headwaters to the wilderness boundary.

Segment 2 - From the wilderness boundary near Sheeps Crossing to 0.1

miles above the upper fish barrier.

Segment 3 - From 0.1 miles below the lower fish barrier to Greer.

Classification and Length

Segment 1 - Wild, 4.3 miles

Segment 2 - Recreational, 1.7 miles

Segment 3 - Wild, 2.1 miles

Changes from previous

documents

Segment 2 extended downstream.

Section of Segment 3 with two fish barriers removed because the freeflowing character of the river is affected. The river section is no longer flowing in a natural condition and the gabion structures have

modified the waterway.

Another section of Segment 3, from the Government Springs trailhead/ toilet to the forests boundary, was removed because its short length is

not manageable as an eligible river.

Location This river starts on the northern slopes of Mount Baldy in Mount Baldy

Wilderness and flows northeast to the confluence with East Fork Little

Colorado River.

**District** Springerville

County Apache

**Legal Description** Township/Range: T06N, R26E; T06N, R27E; T07N, R27E; Gila and

Salt River Meridian

#### **River-related Resources**

Scenery

Scenery is an Outstandingly Remarkable Value (ORV) because diversity of landscapes through which the river flows. This is further enhanced by seasonal color variations.

The West Fork Little Colorado River is a large, perennial river with its headwaters on the northern slope of 11,043-foot Mount Baldy. The river flows northeasterly towards Greer. Scenery is diverse along the 9-mile section from headwaters to Greer. In most years snow remains in the higher elevation through June. The river flows through quiet, smooth pools as well as tumbling down rock and boulder-strewn sections. Because of extensive aspen patches, the fall colors provide outstanding views. From the headwaters to the wilderness boundary near Sheeps Crossing (Segment 1), the river flows through meadows that are surrounded by mixed conifer forest. The river crosses State Highway 273 and begins its descent into a deep, narrow canyon in Segment 2. In Segment 3 the river flows through a 200 to 500-foot-deep forested canyon. The canyon walls are rock-faced with boulders in some sections and dense forest in others. These rock faces are heavy with lichen and moss. The river flows through boulders of various sizes and glides through quiet pools. Segments 1 and 3 are untouched by roads which enhances the semi-primitive or primitive experience, while Segment 2 is popular with anglers, hikers, and wildlife viewers. Pictures of the West Fork Little Colorado River appear in many state and regional publications, including Arizona Highways.

Recreation

Recreation is an ORV because of the variety of recreation opportunities that attract visitors from throughout the area of comparison.

The area is known for its wildlife, fishing, hiking, scenery, and wildlife viewing. Hiking and fishing are common recreation activities along all segments, but are concentrated along Segment 2. The streamside vegetation attracts wildlife and provides viewing opportunities. Elevations range from 8,400 to 11,000 feet, while landscape varies from high elevation montane grasslands to canyons to meadows. Primitive camping is available in and near the many streamside meadows in Segment 1. Hikers and horseback riders use West Baldy Trail #94. Over 90 percent of this trail is in Mount Baldy Wilderness, where group sizes are limited to ensure a primitive experience. Segment 2 receives the most recreation, because hikers and anglers take advantage of the easy access and close proximity to State Highway 273. Arizona Department of Game and Fish regularly stocks Segment 2 with Apache trout. No designated trail follows Segment 3, but a user-created route follows the entire segment. Riparian and meadow vegetation adjacent to the river attracts elk and deer. Visitors may also see bear, coyote, fox, wolf, and a variety of small mammals such as squirrels and chipmunks. Many bird species, including osprey, are often seen along the river.

Geology

The present day landscape reflects its volcanic origins. Mt. Baldy rises 2,200 feet above the surrounding lava plateau. It is composed mainly of latite. Two distinct lava flows occurred approximately 10 and 8.6 million years ago and are separated by the Sheeps Crossing Formation. The Sheeps Crossing Formation consists of sediments commonly found near the mouths of larger valleys. This deposit has been eroded and may only exist in areas where it has been protected by overlaying basalt. The sediments were formed from volcanic debris and pieces of solidified lava that were set in motion by either explosions or precipitation. The debris traveled quickly down drainages, picked up large boulders, and formed large colluvial fans. The Sheeps Crossing Formation has two distinct members. The lower member appears as brecchia, sandstone, gravel, airfall tephra, and abundant unsorted fragmental units deposited by mudflows. The upper member is characterized by crudely-stratified, poorly-sorted sand and gravel, as seen near the old railroad grade near Thompson Ranch along Burro Creek.

Surrounding Mt. Baldy, younger basaltic rocks occur as cinders, agglomerate, intrusive, and extrusive rocks. These basalts overlie the Mt. Baldy and earlier volcanic rocks. The basalt exposed in the Little Colorado River valley north of Greer is more than 150 meters thick. Local accumulations of cinders, in some of the more than 170 cinder cones, may exceed 200 meters.

At least four times in the last 200,000 years, glaciers have formed in the upper valleys of the Little Colorado River. They have produced cirques, side glacial channels, and U-shaped valleys, and have left well-formed moraines and scattered gravel deposits. These can be seen above Sheeps Crossing and Lee Valley Reservoir along the East and West Forks Little Colorado River.

Threatened fish species include Apache trout. The West Fork Little Colorado River above the fish barriers between Segments 2 and 3 is an Apache trout recovery stream. Yearly stocking at Sheeps Crossing supports this important Apache trout fishery.

Wildlife habitat is an ORV because of the high quality habitat for endangered Southwestern willow flycatcher.

Endangered wildlife species include Southwestern willow flycatcher. Threatened wildlife species include Mexican spotted owl. Sensitive wildlife species include northern goshawk, Arizona montane vole, and water shrew. The Mexican gray wolf has dispersed into the river area from its reintroduction site.

West Fork Little Colorado River is part of the recognized Upper Little Colorado River Watershed Important Bird Area. The riparian corridor contains a significant amount of intact, diverse, high-elevation habitat that supports a diversity of breeding species, many of which nest only in the high elevations in Arizona.

Historic resources include a trash dump and the remains of an old lodge in the Greer area. The abandoned Apache Railroad bed (Railroad Grade Trail #601) crosses Segment 2.

**Fish** 

Wildlife

Historic

**Prehistoric** 

There is evidence of prehistoric use on Mount Baldy near the headwaters and along the river segments, but no sites have been recorded. The West Fork Little Colorado River is located in a steep-sided canyon for much of its length. This factor, plus the high elevation, makes it unlikely that precontact habitation sites exist along the river. However, prehistoric hunting camps or rock art could occur in the river corridor.

Hydrology

Stream flow is year-round but increases during spring run-off and summer rains. The State of Arizona has classified all river segments as "unique waters." Stream width varies from 10 to 12 feet, depending upon the season. Two fish barriers, built in 2004-2005, are present between Segments 2 and 3. Both are backfilled with gravel to prevent pool formation immediately above the structures. Other minor fish habitat structures are found in Segments 2 and 3.

Vegetation

Sensitive plant species include Goodding's onion, Bebb's willow, and Arizona willow.

The landscape surrounding Segments 1 and 2 is dominated by spruce, corkbark fir, Douglas-fir, white fir, and some ponderosa pine. A beetle infestation has killed a portion of the spruce forest in Segment 1. The stream channel is bordered by spruce, Douglas-fir, willows, grasses, forbs, and abundant wild flowers. The landscape surrounding Segment 3 is similar to the other segments, but ponderosa pine increases as the river flows towards Greer. The ongoing drought has affected many conifers along Segment 3. Deciduous species in the canyon include aspen, willow, and alder.

**Land Ownership** 

All national forest.

**Transportation** 

The West Baldy Trailhead is the main access into Mount Baldy Wilderness and is within 0.2 miles of Segment 2. West Baldy Trail #94 parallels Segment 1, while Mount Baldy Crossover Trail #96 crosses Segment 1 and connects to West Baldy Trail. State Highway 273 parallels and crosses Segment 2. This road is being upgraded with gravel and a new bridge across the West Fork Little Colorado River. Railroad Grade Trail #601 crosses Segment 2 just west of State Highway 273. In Segment 3, several user-created trails start at Government Springs and follow the drainage south. Forest Road 575 parallels the northernmost 0.4 miles of Segment 3.

**Livestock Grazing** 

Grazing does not occur along Segments 1, 2, and 3 in the South Fork Conservation Area, which included Mount Baldy Wilderness.

**Past Activities** 

Some logging has occurred on the lands surrounding Segment 2. Thinning has occurred above the river canyon along Segment 3.

**Special Land Uses** 

A Navopache power line crosses the West Fork Little Colorado River between Segments 2 and 3.

**Special Management Designations** 

Segment 1 is within Mount Baldy Wilderness and a Class I airshed. Segments 2 and 3 are within the West Fork Little Colorado River Special Management Area, where motorized vehicle use is not allowed, and are within the Lee Valley Recreation Area. The northern end of Segment 3 is within the Greer Recreation Area.

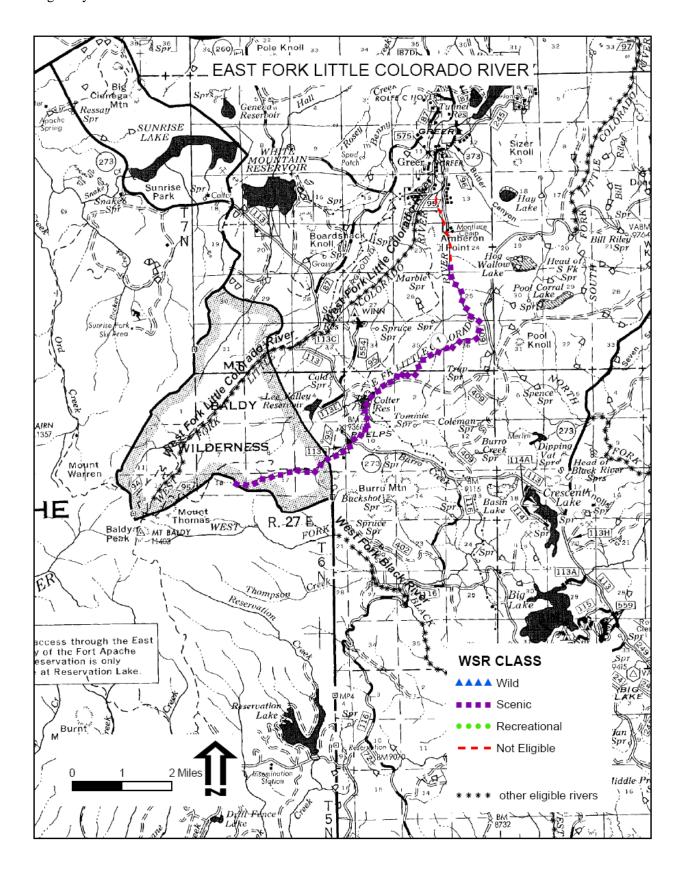
Little Colorado River Basin West Fork Little Colorado River

Other

Local users are from Show Low, Pinetop-Lakeside, Eagar, Springerville, St. Johns, Alpine, and other local communities. Regional visitors are from Phoenix and Tucson. Other users come from across the West.

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# EAST FORK LITTLE COLORADO RIVER



# East Fork Little Colorado River

Is the River free flowing?

Yes or No

Yes

Potential Outstandingly Remarkable Values

Scenery, Recreation, Fish, Wildlife, Vegetation

Area of Comparison

Statewide

**Eligible Segment** 

One segment, from the headwaters to 0.1 miles above the upper fish

barrier.

**Classification and Length** 

Scenic, 9.3 miles

Changes from previous

documents

The river section from the upper fish barrier downstream is no longer eligible because the two fish barriers affect the free-flowing character of the river. The river section is no longer flowing in a natural condition

and the gabion structures have modified the waterway.

**Location** This river starts in Mount Baldy Wilderness and flows northeast through

the Phelps Cabin Research Natural Area (RNA) and Phelps Botanical

Area and north to Greer.

**District** Springerville

County Apache

**Legal Description** Township/Range: T06N, R27E & T07N, R27E; Gila and Salt River

Meridian

#### River-related Resources

Scenery

Scenery is an Outstandingly Remarkable Value (ORV) because of the diversity of landscapes and vegetation types that the river flows through and the broad vistas visible from the river.

The East Fork Little Colorado River is one of the most scenic rivers in Arizona. Elevations range from 8,400 to 10,400 feet, while landscapes vary from forests to meadows to canyons. Its headwaters are located on the east slope of 11,043 foot Mount Baldy and it flows east and then north to Greer. In most years snow caps Mount Baldy through June. The canyon's size provides outstanding views of the surrounding area. Large boulders, three and four stories tall, dominate the view to the north and provide a spectacular backdrop for the river and streamside meadows. Because of extensive aspen patches, the fall colors enhance the outstanding views. From the headwaters to Colter Reservoir, the river flows through meadows that are surrounded by mixed conifer forest, with willows and alder dotting the streamside. The river crosses State Highway 273 just west of Colter Reservoir. From Colter Reservoir the river flows north through a narrow river canyon where water rushes among boulders or glides through quiet pools. The canyon becomes as deep as 600 feet and is accented by rock cliffs heavy with lichen and moss.

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#### Recreation

Recreation is an ORV because of the variety of opportunities attract visitor from within and beyond the area of comparison.

The area is known for its hiking, scenery, and wildlife viewing. The primary recreation opportunities are hiking and horseback riding. Access to the river segment within Mount Baldy Wilderness is limited to foot and horse travel. Gabaldon Campground and the East Baldy Trailhead are located adjacent to the upper river segment. Hiking is available on East Baldy Trail #95. Over 90 percent of the trail is in Mount Baldy Wilderness, where group sizes are limited to ensure a primitive experience. Hiking and wildlife viewing are common activities from the headwaters to State Highway 273. Primitive camping is available in and near the many streamside meadows. No designated trail exists along the lower river, but a user-created route follows the river upstream for about 1½ miles from the forests boundary near Greer. As such, the canyon provides isolation and solitude for hikers and anglers. Riparian and meadow vegetation adjacent to the river attracts elk and deer. Visitors may also see bear, coyote, fox, wolf, and a variety of small mammals such as squirrels and chipmunks. Many bird species, including osprey, are often seen along the river.

Geology

The present day landscape reflects its volcanic origins. Mt. Baldy rises about the surrounding lava plateau about 2,200 feet. It is composed mainly of latite. Two distinct lava flows occurred approximately 10 and 8.6 million years ago and are separated by the Sheeps Crossing Formation. The Sheeps Crossing Formation consists of patches of sediments found commonly near the mouths of the larger valleys. The deposit has been eroded and may only exist in areas protected by overlaying basalt. The sediments were formed from volcanic debris and pieces of solidified lava that were set in motion by either explosions or precipitation. The debris traveled quickly down drainages, picked up large boulders, and formed large colluvial fans. The Sheeps Crossing Formation has two distinct members. The lower member of the formation appears as brecchia, sandstone, gravel, airfall tephra, and abundant unsorted fragmental units deposited by mudflows. The upper member is characterized by crudely stratified, poorly sorted sand and gravel, as seen near the old railroad grade near Thompson Ranch along Burro Creek.

Surrounding Mt. Baldy, younger basaltic rocks occur as cinders, agglomerate, intrusive, and extrusive rocks. These basalts overlie the early volcanic rocks and the Mt. Baldy and earlier volcanic rocks. The maximum thickness of basalt exposed in the Little Colorado River valley north of Greer is greater than 150 meters. Local accumulations of cinders in some of the more than 170 cinder cones may exceed 200 meters in height.

At least four times in the last 200,000 years, glaciers have formed in the upper valleys of the Little Colorado River. They have produced cirques, side-glacial channels, and U-shaped valleys and have left well-formed moraines and scattered gravel deposits to mark their former positions. These can be seen above Sheeps Crossing and Lee Valley Reservoir along the East and West Forks Little Colorado River.

**Fish** 

Fish habitat is an ORV because of the high quality Apache trout habitat.

Threatened fish species include Apache trout. Sensitive fish species include bluehead sucker.

Other native fish include speckled dace. This river segment is an Apache trout recovery stream and supports an important fishery. The river has the potential to support native fish assemblages. Non-native brown trout are found below the fish barriers.

Wildlife

Wildlife species and habitat are ORVs because of the number of special status wildlife species and the habitat that supports them.

Endangered wildlife species include Southwestern willow flycatcher. Threatened wildlife species include Mexican spotted owl. Candidate wildlife species include New Mexico meadow jumping mouse. Sensitive wildlife species include northern goshawk, Arizona montane vole, and water shrew. The Mexican gray wolf has dispersed into the river area from its reintroduction site.

This area supports a large diversity of fauna associated with the unique forests of eastern Arizona.

East Fork Little Colorado River is part of the recognized Upper Little Colorado River Watershed Important Bird Area. The riparian corridor contains a significant amount of intact, diverse, high-elevation habitat that supports a diversity of breeding species, many of which nest only in the high elevations in Arizona.

**Historic** 

Two historic resources have been recorded along the river. One is a homestead site and the other is Phelps Cabin. Phelps Cabin was built in the early 20<sup>th</sup> century to house researchers working in the Phelps Cabin RNA. The abandoned Apache Railroad grade (Railroad Grade Trail #601) crosses the river segment.

**Prehistoric** 

Native American shrines, generally attributed to Puebloan (most likely Zuni) and Apachaen groups, exist on Baldy Peak. The East Fork Little Colorado River is located in high-elevation country, so it is unlikely that precontact habitation sites exist along the river. However, prehistoric hunting camps or rock art could occur along the river corridor.

Hydrology

The upper stream is run-off dependent, but below the road it is spring-fed. The upper stream has three 3-4 foot waterfalls. Two fish barriers, built in 2004-2005, are present north (downstream) of the eligible river segment. Both are backfilled with gravel to prevent pool formation immediately above the structures. Other minor fish habitat structures are found in the segment.

### Vegetation

Vegetation is an ORV because the river corridor and surrounding riparian areas support a large diversity of flora associated with the unique forests of eastern Arizona.

Sensitive plant species include Goodding's onion, White Mountains paintbrush, Bebb's willow, and Arizona willow.

The stream flows through a variety of plant communities including subalpine meadows, mixed conifer, ponderosa pine, Douglas-fir, and pinebunch grass. The year-round stream is important to the riparian areas and wildlife. The importance of the riparian communities is demonstrated by the establishment of the Phelps Cabin RNA and the Phelps Botanical Area.

#### **Land Ownership**

All national forest.

#### **Transportation**

Access to the portion of the river segment within Mount Baldy Wilderness is limited to foot and horse travel. The upper river is accessed from State Highway 273 and East Fork and East Baldy Trails #95. Mount Baldy Crossover Trail #604 crosses the river east of the wilderness boundary. Railroad Grade Trail #601 crosses and parallels the river just east of State Highway 273. Fishermen and day-users access the lower river from Forest Road 8079.

#### **Livestock Grazing**

Livestock grazing occurs along the river segment in the Voigt and Pool Corral Allotments. Grazing does not occur within the South Fork Conservation Area which includes the western and northern sections of the river segment

#### **Past Activities**

Some logging has occurred east of State Highway 273.

## **Special Land Uses**

State Highway 273 and a Navopache power line cross the river segment east of Mount Baldy Wilderness. Coulter Reservoir (not used) is located immediately west of Railroad Grade Trail and within the power line corridor. Gabaldon Campground and Phelps Trailhead are within 0.1 miles of the upper river segment. Montlure Church Camp is north of the river segment.

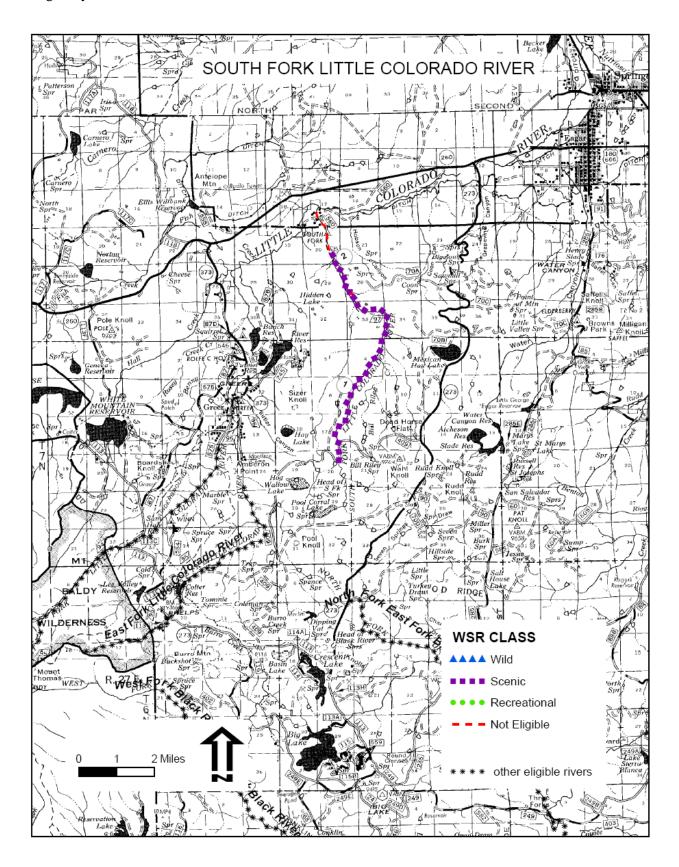
# **Special Management Designations**

Approximately 2 miles of the river segment is within Mount Baldy Wilderness and a Class I airshed. An additional 0.6 miles are within the Phelps Botanical Area. The northern 2 miles of the river segment are within the East Fork Little Colorado River Special Management Area, where motorized vehicle use is not allowed. The remainder of the river segment outside Mount Baldy Wilderness is within the Lee Valley Recreation Management Area, where motorized vehicle use is restricted.

#### Other

Local users are from Show Low, Pinetop-Lakeside, Eagar, Springerville, St. Johns, Alpine, and other local communities. Regional visitors are from Phoenix and Tucson.

# SOUTH FORK LITTLE COLORADO RIVER



# South Fork Little Colorado River

Is the River free flowing?

Yes or No

Yes

Potential Outstandingly Remarkable Values

Scenery

Area of Comparison

Statewide

**Eligible Segments** 

Segment 1 - From Forest Road 409 north to 0.1 miles above the upper

fish barrier.

Segment 2 - From 0.1 miles below the upper fish barrier to 0.1 miles

above the lower fish barrier.

Classification and Length

Segment 1 - Scenic, 5.9 miles Segment 2 - Scenic, 1.4 miles

Changes from previous documents

Scenery Outstandingly Remarkable Value (ORV) added.

Prehistoric ORV dropped because these resources are on state and

private lands north of the forests.

River segment extended south (upstream) to Forest Road 409.

The original eligible segment was split to remove two fish barriers that affect the free-flowing character of the river. The river section is no longer flowing in a natural condition and the concrete-slab structures

have modified the waterway.

The river north of the lower fish barrier was dropped for manageability reasons because it crosses less than 34 mile of Forest Service land and

is not contiguous to another river segment.

Location The South Fork Little Colorado River arises on the south side of Wahl

Knoll and flows approximately 10½ miles north to the Little Colorado

River.

**District** Springerville

County Apache

**Legal Description** Township/Range: T07N, R28E & T08N, R28E; Gila and Salt River

Meridian

#### **River-related Resources**

Scenery is an ORV because the diversity of textures, colors, and forms

represented in the canyons' trees, shrubs, streamside vegetation, and

animals create a unique area for hiking and fishing.

Elevations range from 7,400 to 9,000, with landscapes varying from forests to canyons. North of Forest Road 409 the South Fork Little Colorado River rushes down a fairly steep, thickly-forested canyon with lush riparian vegetation. The rock canyon walls are covered with moss and lichen. The river flows through boulders of various sizes and glides through quiet pools. The lower 3 miles open into a wider canyon with more riparian vegetation. Streamside vegetation includes willows and alders.

WSR Eligibility Report Eligibility Evaluations

Recreation

The primary recreation opportunities are hiking, horseback riding, mountain biking, and fishing. Access to the northern end of the Segment 2 is by Forest Road 560 to South Fork Campground and Trailhead. Hikers, horseback riders, and mountain bikers use South Fork Trail #97. The trail follows the river upstream for approximately 3½ miles. At that point the trail climbs southeast away from the river. A primitive user-created trail continues along the river for about another mile. South Fork Campground is located immediately adjacent to the river north of the eligible segments. Most fishing occurs within 1 mile of the campground. Arizona Department of Game and Fish regularly stocks the South Fork with Apache trout. The riparian and meadow vegetation adjacent to the river attracts elk and deer. Visitors may also see bear, coyote, fox, wolf, and a variety of small mammals such as squirrels and chipmunks. Many bird species, including osprey, are often seen along the river.

Geology

The present day landscape reflects its volcanic origins. Mt. Baldy rises 2,200 feet about the surrounding lava plateau. It is composed mainly of latite. Two distinct lava flows occurred approximately 10 and 8.6 million years ago and are separated by the Sheeps Crossing Formation. The Sheeps Crossing Formation consists of patches of sediments found commonly near the mouths of the larger valleys. The deposit has been eroded and may only exist in areas protected by overlaying basalt. The sediments were formed from volcanic debris and pieces of solidified lava that were set in motion by either explosions or precipitation. The debris traveled quickly down drainages, picked up large boulders, and formed large colluvial fans. The Sheeps Crossing formation has two distinct members. The lower member appears as brecchia, sandstone, gravel, airfall tephra, and abundant unsorted fragmental units deposited by mudflows. The upper member is characterized by crudely stratified, poorly sorted sand and gravel, as seen near the old railroad grade near Thompson Ranch along Burro Creek.

Surrounding Mt. Baldy, younger basaltic rocks occur as cinders, agglomerate, intrusive and extrusive rocks. These basalts overlie the Mt. Baldy and earlier volcanic rocks. The maximum thickness of basalt exposed in the Little Colorado River valley north of Greer is greater than 150 meters. Local accumulations of cinders in some of the more than 170 cinder cones may exceed 200 meters in height.

Threatened fish species include Apache trout. Sensitive fish species include Little Colorado sucker.

Most of the South Fork Little Colorado River is an Apache trout recovery stream and an important fishery. Other native fish include speckled dace. The lowest portions of this drainage provide habitat for non-native brown and rainbow trout.

**Fish** 

WSR Eligibility Report Eligibility Evaluations Little Colorado River Basin South Fork Little Colorado River

Wildlife Endangered wildlife species include southwestern willow flycatcher.

Threatened wildlife species include Mexican spotted owl. Sensitive wildlife

species include northern goshawk, gray catbird, and four-spotted

skipperling butterfly.

The great variety of habitat types provides for diversity and abundance of

wildlife species, including veery and American redstart.

South Fork Little Colorado River is part of the recognized Upper Little Colorado River Watershed Important Bird Area. The riparian corridor contains a significant amount of intact, diverse, high-elevation habitat that supports a diversity of breeding species, many of which nest only in the

high elevations in Arizona.

**Historic** Several historic homesteads and ranches are found along the South Fork on

private land north of the forests boundary.

**Prehistoric** Extensive prehistoric sites are located on private and state lands north of

the forests boundary. The area was used extensively by the prehistoric Mogollon and ancestral Puebloans. The river valley provided a good area for farming. The Little Colorado River is considered sacred by tribes that

have lived in the area because of its life-giving waters.

**Hydrology** Stream flow is year-round, but becomes minimal during the summer. Two

fish barriers, built in 2004 and 2005, are present in the drainage. One is between Segments 1 and 2; the other is north of Segment 2. Both are backfilled with gravel to prevent pool formation immediately above the structures. Other minor fish habitat structures are found in the drainage.

**Vegetation** Sensitive plant species include Goodding's onion and Bebb's willow.

The landscape is dominated by ponderosa pine with Douglas-fir, white fir,

spruce, and piñon-juniper.

The healthy riparian area has alder, willow, and cottonwood throughout the

river segments.

Land Ownership All national forest.

**Transportation** Recreation access is from Forest Road 560, Forest Road 409, and other

small old logging roads. Forest Road 8070A crosses between the two eligible river segments, but is closed to public use. South Fork Trail #97

parallels Segment 2 and crosses Segment 1.

**Livestock Grazing** The river segments are within the Pool Corral and Greer Allotments.

Past Activities Timber along Segment 2 was harvested in 1983.

Special Land Uses South Fork Campground is located north of Segment 2.

**Special Management** 

Designation

The Hidden Lake Special Management Area restricts motor vehicle use in

Segment 2.

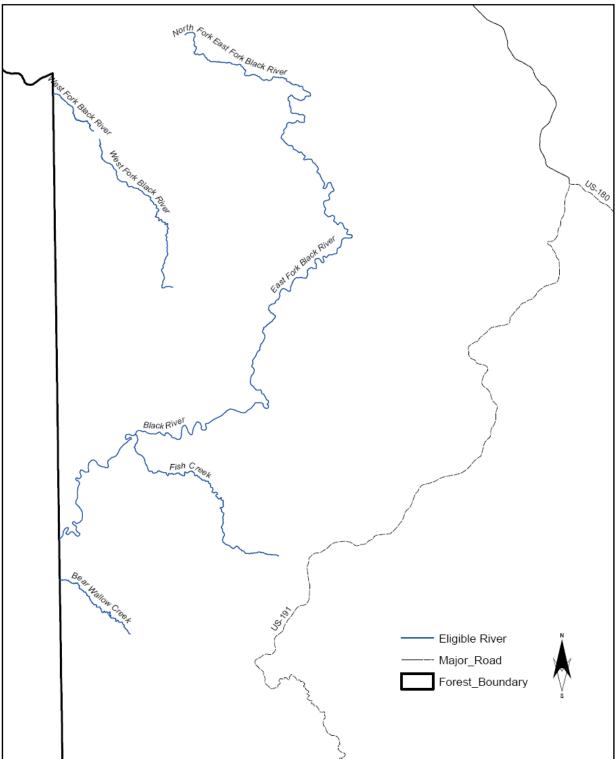
Other Local users are from Eagar, Springerville, Alpine, St. Johns, Show Low,

and Pinetop-Lakeside. Regional visitors are from Phoenix and Tucson.

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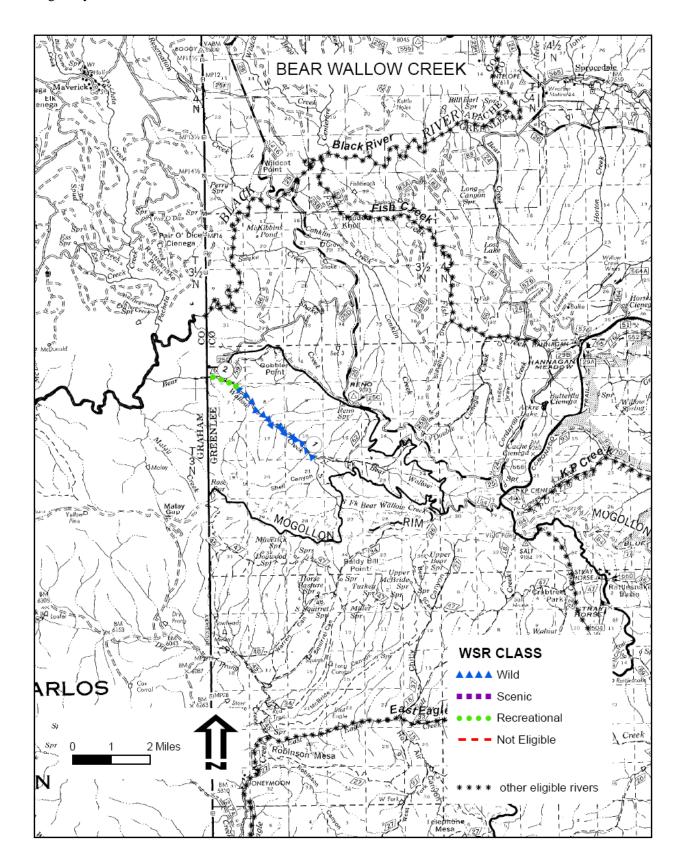
# SALT RIVER BASIN

Salt River Basin



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# BEAR WALLOW CREEK



## Bear Wallow Creek

Is the River free flowing?

Yes or No

Yes

**Potential Outstandingly** 

**Remarkable Values** 

Scenery, Recreation, Fish, Wildlife, Vegetation

**Area of Comparison** Statewide

**Eligible Segments** Segment 1 - From the confluence of North and South Forks Bear

Wallow Creek to 0.1 miles above the fish barrier.

Segment 2 - From 0.1 miles above the fish barrier to the forests

boundary with the Fort Apache Indian Reservation.

Classification and Length Segment 1 - Wild, 3.7 miles

Segment 2 - Recreational, 0.9 miles

Changes from previous documents

Recreation and Wildlife Outstandingly Remarkable Values (ORV)

added.

The original river segment was split to reflect the presence of a low,

naturalized fish barrier in Segment 2.

Location Bear Wallow Creek originates on the edge of the Mogollon Rim and

flows northwesterly for approximately 13 miles to the Black River. Both

eligible river segments are within Bear Wallow Wilderness.

**District** Alpine County Greenlee

**Legal Description** Township/Range: T03N, R28E; Gila and Salt River Meridian

# **River-related Resources**

Scenery Scenery is an ORV because of the river segments' location on the

Mogollon Rim and the extensive aspen stands that create seasonal color

variations.

The location of these river segments is unique in that they are within a headwater basin on the Mogollon Rim that is filled with aspen stands which returned after large historic wildfires. As such, the river corridor is a picture of forest succession in progress. The whole basin is bright green in the summer and glows golden with fall colors in late September and early October. Hikers along the Schell Canyon Trail are treated to spectacular

views to the south across the Mogollon Rim toward Mt. Graham.

Recreation Recreation is an ORV because the opportunities are popular enough to

attract visitors from throughout and beyond the area of comparison.

Three trails access the main trail along Bear Wallow Creek, providing a variety of loops for day hiking, backpacking, and horseback riding.

Hunting and fishing are also popular activities.

Geology

The geology of the creek is volcanic in origin. Basalt and andesite from the Datil Formation were deposited in large lava flows during the Quaternary and Tertiary periods. Between episodes of volcanic activity sedimentary deposits were formed, either as crudely-stratified sand and gravel deposits or as mudflow-deposited breccia, sandstone, gravel, and unsorted fragmental units.

Fish

Fish habitat is an ORV because of the fine quality of the Apache trout habitat.

Threatened fish species in Bear Wallow Creek include Apache trout.

Bear Wallow Creek is a designated Apache trout recovery stream. This fish occurs naturally only in the White Mountains of eastern Arizona. There is a low, naturalized fish barrier, approximately 0.8 miles upstream from the forest/reservation boundary, to prevent non-native fish from swimming upstream and hybridizing or competing with the native Apache trout. Other native fish species include speckled dace.

Wildlife

Wildlife species and habitat are ORVs because of the variety of special status species and the high quality habitat for all wildlife species.

Endangered wildlife species include southwestern willow flycatcher. Threatened wildlife species include Mexican spotted owl. Sensitive wildlife species include water shrew, spotted bat, lowland leopard frog, northern goshawk, narrow-headed gartersnake, Ferris' copper and four-spotted skipperling butterflies, and possibly northern leopard frog. The Mexican gray wolf has dispersed into the river area from its reintroduction site.

The dense vegetation and cover and large down logs make the river corridor prime habitat for black bear and blue (dusky) grouse. Coyote, fox, and Mexican gray wolf pass through the area. One wolf pack's territory includes Bear Wallow Creek and Bear Wallow Wilderness.

Rocky Mountain elk, including rutting bulls in the fall and calves in the spring, are commonly seen along the river corridor. Deer are there too, but are harder to spot. Several Mexican spotted owl pairs have territories along the river and may be heard calling to one another. The riparian corridor contains habitat for important owl prey species, such as mice and voles. Birds that use high elevation riparian areas during spring and summer include MacGillivray's, red-faced, and yellow warblers. Lincoln sparrows may breed in the river corridor. Other wildlife species include veery, bandtailed pigeon, turkey, flammulated owl, pine grosbeak, coyote, bobcat, striped skunk, long-tail weasel, occult little brown bat, white-tailed deer, raccoon, and Abert's squirrel.

Historic

There are no known historic resources.

**Prehistoric** 

There are no known prehistoric resources.

Hydrology

The State of Arizona has classified both river segments as a "unique water" because of good water quality. There is a low, naturalized fish barrier near the upstream end of Segment 2.

WSR Eligibility Report Eligibility Evaluations Salt River Basin Bear Wallow Creek

**Vegetation** Vegetation is an ORV because of the quality and extent of the riparian

vegetation.

Sensitive plant species along the river include Goodding's onion and

Blumer's dock.

Besides the large aspen stands that grew after wildfires, old-growth Douglas-fir, white fir, and spruce are found in the river corridor with large, old-growth ponderosa pine on the adjacent south-facing slopes. Rocky Mountain maple, alder, elderberry, and three species of willows are found along the river. Unique high elevation herbaceous riparian plants are baneberry, sweet cicely, cow parsnip, twinberry, false-hellebore, and

monkshood.

Land Ownership All national forest.

**Transportation** Access is limited to foot and horse travel within Bear Wallow Wilderness.

Bear Wallow Trail #63 parallels the river segments. Reno Trail #62, Gobbler Point Trail #59, and Schell Canyon Trail #316 provide access to

Bear Wallow Trail.

**Livestock Grazing** Both river segments are within the KP Summer Allotment. Grazing use in

this pasture was waived back to the Forest Service in November 2001 and

the limited amount of forage has not been reallocated.

Past Activities Occasional suppression of small wildfires and some livestock grazing.

Special Land Uses Used by licensed and permitted outfitters and guides for hunting and

fishing.

Special Management

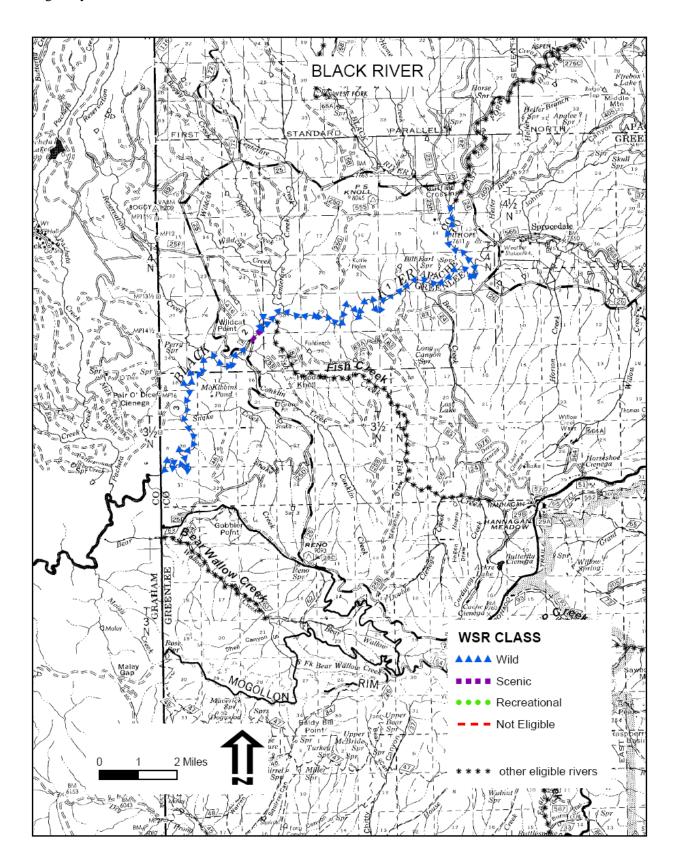
. Designation Both river segments are within Bear Wallow Wilderness.

Other This is a popular hiking destination with many summertime users from

across the state and from local communities.

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# BLACK RIVER



# Black River

Is the River free flowing?

Yes or No

Yes

Potential Outstandingly Remarkable Values Scenery, Recreation, Fish, Wildlife

Area of Comparison Statewide

Eligible Segments Segment 1 - From the confluence of East and West Forks to 1/4 mile

above the bridge at Wildcat Crossing.

Segment 2 - From ¼ mile upstream to ¼ mile downstream of the bridge. Segment 3 - From ¼ mile downstream of bridge to the forests boundary.

Classification and Length Segment 1 - Wild, 11 miles

Segment 2 - Scenic, 0.5 miles Segment 3 - Wild, 7.3 miles

**Changes from previous** 

documents

Vegetation Outstandingly Remarkable Value (ORV) dropped because

the value is similar to other nearby eligible rivers.

**Location** The Black River originates at the confluence of the East Fork and West

Forks Black River. Then it flows southwesterly to the confluence with the White River on the White Mountain Apache Indian Reservation.

**District** Alpine

**Counties** Apache, Greenlee (county boundary)

Legal Description Township/Range: T03.5, R28E; T04N, R27.5; T04N, R28E; Gila and

Salt River Meridian

### **River-related Resources**

Scenery Scenery is an ORV because the Black River Canyon is an outstanding

example of a southwestern river system.

The Black River is a large, perennial river confined between lava ridges. The canyon's size provides a great diversity of views from open ponderosa pine stands on south-facing slopes to dense forests on north-facing ones. There are brushy slopes and lichen-covered scree slopes as well. The river alternates between quiet, smooth pools and tumbling, boulder-strewn sections. Near Wildcat Crossing, bands of stratified sandstone, breccia, and

gravel add color to the canyon walls.

**Recreation** Recreation is an ORV because the opportunities attract users from

throughout and beyond the area of comparison.

Primitive, isolated recreation opportunities include fishing, hiking, backpacking, horseback riding, and hunting. There are no developed sites in the canyon but many visitors explore the canyon from Wildcat Crossing. The trail route through the canyon varies with the changing floodplain. Occasionally, adventurers have floated the river segments during the spring run-off. Spring and fall wildflower displays also draw visitors to the river

canyon.

# WSR Eligibility Report Eligibility Evaluations

#### Geology

The geology of this river is of volcanic origin. Basalt and andesite from the Datil Formation were deposited in large lava flows during the Quaternary and Tertiary periods. Between episodes of volcanic activity, sedimentary rocks were formed either as crudely-stratified sand and gravel deposits or mudflow-deposited breccia, sandstone, gravel and unsorted fragmental units. These are evident in the bands above the Black River near Wildcat Crossing.

**Fish** 

Fish species and habitat are ORVs because of the diversity of native fish species present in the river and quality habitat provided.

Threatened fish species include Apache trout. Candidate fish species include roundtail chub. Sensitive fish species include Sonora sucker and desert sucker.

The river also provides habitat for native speckled dace. Non-native fish present include smallmouth bass and rainbow and brown trout. Apache trout are stocked during the summer by Arizona Game and Fish Department upstream in the East and West Forks Black River.

Wildlife

Wildlife species and habitat are ORVs because of the diversity and quantity of wildlife species and the quality of the habitat.

Threatened wildlife species include Mexican spotted owl. Candidate wildlife species include New Mexico meadow jumping mouse. Sensitive wildlife species include northern goshawk (Segment 1), Arizona Bell's vireo, water shrew, narrow-headed gartersnake, and possibly northern leopard frog. The Mexican gray wolf has dispersed into the river area from its reintroduction site.

A herd of Rocky Mountain bighorn sheep make the canyon home and can be seen on canyon walls or occasionally coming down to water at the river. Mule deer and Rocky Mountain elk also frequent the canyon.

The dense vegetation and cover and large down logs make the river corridor prime habitat for black bear. Bear sign (scat and tracks) is common. Coyote, fox, and Mexican gray wolf pass through the canyon. An occasional mountain lion scrape is encountered along the canyon rim.

Abert's and red squirrels make large cone caches under the large trees along the canyon walls. The New Mexico meadow jumping mouse, water shrew, and other small mammals find abundant habitat in the deep grassy benches and well-vegetated river banks.

Osprey nest in tall trees along the river, where they dive for fish. Mexican spotted owl pairs nest along the canyon walls and during the spring their four-note hoot may be heard by campers. Wild turkeys roost in the large ponderosa pines at the base of canyon walls and forage in the canyon bottoms. The elusive red-faced warbler and the Lincoln sparrow may nest within the canyon. Various raptors, such as red-tailed and Cooper's hawks, and other migratory song birds may be seen.

Historic

There are no known historical resources.

**Prehistoric** 

There are no known prehistoric resources.

Hydrology

There are no dams or diversions.

52

WSR Eligibility Report Eligibility Evaluations

Vegetation

Sensitive plant species include Blumer's dock, Goodding's onion, and White Mountains clover.

Changing river directions and canyon wall aspects create highly diverse vegetation communities. Spruce and fir occupy the steepest and coldest sections and ponderosa pine the warmest sections. Mixed conifer with large Douglas-firs occurs throughout the canyon on wet bottoms and cooler north and east slopes. Blumer's dock occurs along the waterway. Poisonous water hemlock also occurs sporadically. Willows and alders are found along the water's edge and in some areas, extensive willow stands occur. Common shrubs include golden currant, wild rose, and dogwood. The river and its canyon include a fine example of healthy and abundant high elevation riparian vegetation.

Land Ownership

All national forest.

**Transportation** 

Vehicle access to the Black River is at Wildcat Crossing on Forest Road 25, approximately 13 miles from U.S. Highway 191. Black River Trail #51 parallels the entire river segment. This primitive trail can accommodate hikers and horseback riders. Bear Creek Trail #66 and Fish Creek Trail #60 also provide non-motorized access to the Black River.

**Livestock Grazing** 

Livestock grazing is no longer authorized in the Black River canyon because of the lack of sustainable forage and the sensitivity of the riparian area.

**Past Activities** 

Occasional suppression of small wildfires and some livestock grazing.

**Special Land Uses** 

There has been limited use by permitted outfitters and guides for hunting and fishing.

Special Management Designations

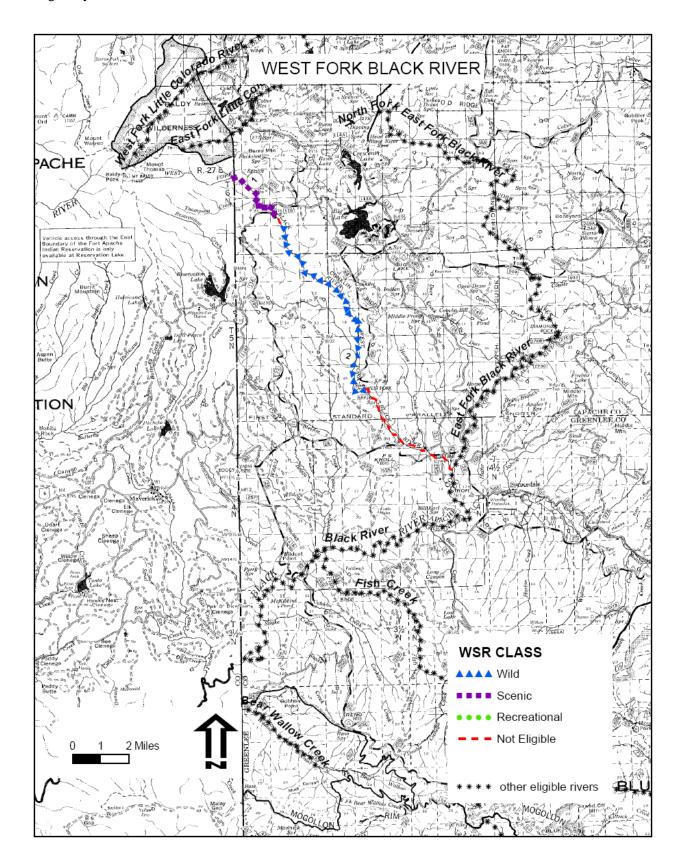
All river segments are within the Black River Special Management Area. All river segments, with the exception of a short stretch at Wildcat Crossing, are within Black River Canyon Inventoried Roadless Area. The area is closed to motor vehicles except for a small area at Wildcat Crossing.

Other

The upper ends of Segment 1 and Segment 2 are popular hiking destinations for summer users from local communities and across the state.

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# WEST FORK BLACK RIVER



# West Fork Black River

Is the River free flowing?

Yes or No

Yes

Area of Comparison

Statewide

Potential Outstandingly Remarkable Values

Segment 1 - Scenery, Recreation, Fish

Segment 2 - Scenery, Recreation, Fish, Wildlife

**Eligible Segments** Segment 1 - From the forests boundary to 0.15 miles below Forest Road

(FR) 116.

Segment 2 - From 0.1 miles below the lower fish barrier to ½ mile

upstream of West Fork Dispersed Campground.

Classification and Length Segment 1 - Scenic, 3.0 miles

Segment 2 - Wild, 8.6 miles

Changes from previous documents

Historic and Vegetation Outstandingly Remarkable Values (ORV)

dropped.

Segment 1 extended to below FR 116.

Section of Segment 2 with two fish barriers removed because the freeflowing character of the river is affected. The river section is no longer flowing in a natural condition and the gabion and concrete

structures have modified the waterway.

Segment 3 dropped because the values previously identified for the segment are not outstandingly remarkable when compared to other

nearby eligible rivers.

Location The West Fork Black River originates on Baldy Peak on the Fort

Apache Indian Reservation. It flows east to the ASNFs boundary and

then southeast 14 miles to the East Fork Black River.

**Districts** Springerville, Alpine

County Apache

Legal Description Township/Range: T05N, R27E; T05N, R28E; T06N, R27E; Gila and

Salt River Meridian

#### **River-related Resources**

#### Scenery

Scenery is an ORV because of the diversity of landforms and vegetation along the river segments.

West Fork Black River arises on the eastern portion of the Fort Apache Indian Reservation and flows south and east to the confluence with East Fork Black River, southwest of Buffalo Crossing. Elevations range from 7,800 to 9,100 feet, while landscapes vary from forests to meadows to canyons. A panoramic view of the Mount Baldy and Baldy Peak can be seen from the upper river. The mix of conifer and deciduous tree species results in an outstanding display of fall colors. Segment 1 flows through meadows and canyons that are surrounded by mixed conifer forest. Approximately 1 mile upstream from Forest Road 116 the canyon opens into a large high-elevation meadow, much of which is privately owned. Thompson Creek joins the West Fork Black River here. Segment 2 flows through a steep canyon lined with rock cliffs that provide incredible views. The river is confined within a deep canyon that is rock-faced with boulders or covered by dense forest. The river segments are untouched by roads, except Forest Road 116, and provide opportunities for semi-primitive, unconfined experiences. The area immediately adjacent to Forest Road 116 is very popular for fishing and wildlife viewing. Segment 2 is popular with hikers and anglers. Riparian vegetation includes willows and alders.

Recreation

Recreation is an ORV because of the variety of recreation opportunities that attract visitors from within and beyond the area of consideration.

The area is known for its wildlife, fishing, hiking, scenery, and wildlife viewing. The diversity of plants and wildlife in this streamside landscape creates an enjoyable destination for hikers, anglers, campers, and bicyclists. Fishing is a popular recreation activity and occurs mostly near Forest Road 116. Arizona Department of Game and Fish regularly stocks the river with Apache trout. No designated trail exists in Segment 1, but a primitive user-created route follows river from Forest Road 116 to the forests boundary. Thompson Trail #629 begins at Forest Road 116 and parallels Segment 2 for 3½ miles to West Fork Trail #628. This trail is for foot travel only; the nearby old Apache Railroad grade is available for horseback riding and mountain biking. There are no trails downstream of West Fork Trail #628. The riparian and meadow vegetation adjacent to the river attracts elk and deer. Visitors may also see bear, coyote, fox, wolf, and a variety of small mammals such as squirrels and chipmunks. Many bird species, including bald eagles and osprey, are often seen along the river.

#### Geology

The present day landscape reflects its volcanic origins. Mt. Baldy rises 2,200 feet above the surrounding lava plateau. It is composed mainly of latite. Two distinct lava flows occurred approximately 10 and 8.6 million years ago and are separated by the Sheeps Crossing Formation. The Sheeps Crossing Formation consists of patches of sediments found commonly near the mouths of larger valleys. Surrounding Mt. Baldy, younger basaltic rocks occur as cinders, agglomerate, intrusive, and extrusive rocks. These basalts overlie the Mt. Baldy and earlier volcanic rocks. Glaciers have formed in the upper valleys of the Black River. The glacial activity has produced cirques, side-glacial channels, U-shaped valleys and has left moraines and gravel deposits to mark their former positions. These can be seen along the upper Black River drainage.

Fish

Fish habitat is an ORV because of the fine quality of the Apache trout habitat.

Threatened fish species include Apache trout. Candidate fish species include roundtail chub. Sensitive fish species include Sonora sucker and desert sucker.

Other native fish species include speckled dace. The river has been designated as a Blue Ribbon Cold Water Fishery with measures taken to protect and improve native Apache trout habitat. The Apache trout is also an important fishery in the West Fork Black River. Segment 1 is an Apache trout recovery stream. Segment 2 is a future Apache trout recovery stream. Segment 2, downstream of the lower fish barrier, contains sport fish including Apache trout and non-native brown trout. Apache trout are stocked yearly near West Fork Dispersed Campground, south of Segment 2.

Wildlife

Wildlife species and habitat are ORVs because the great variety of habitats provides for high wildlife diversity and abundance.

The river segments provide habitat for threatened wildlife species including Mexican spotted owl. Candidate wildlife species include New Mexico meadow jumping mouse. Sensitive wildlife species include bald eagle, northern goshawk, Arizona montane vole, water shrew, narrow-headed gartersnake, and four-spotted skipperling butterfly. The Mexican gray wolf has dispersed into the river area from its reintroduction site.

A variety of wildlife inhabits the river corridor, including osprey and belted kingfisher. There are numerous raptor nesting sites along the river canyon.

Historic

Historic resources include Civilian Conservation Corps improvements at West Fork Dispersed Campground and Colonel Springs, the Thompson Cabin, and early ranches and homesteads. The abandoned Apache Railroad bed, built between 1917 and 1919, traverses the area.

**Prehistoric** 

Identified archaeological sites include a quarry and several lithic scatters.

59

#### Hydrology

Stream flow is year-round but increases during spring run-off and summer rains. The year-round water is important for wildlife and fisheries. Two fish barriers, built in 1996, are present between Segments 1 and 2. Both are backfilled with gravel to prevent pool formation immediately above the structures. Other minor fish habitat structures are found in Segments 1 and 2.

#### Vegetation

Sensitive plant species include Goodding's onion, White Mountains paintbrush, Bebb's willow, and Arizona willow.

Plant diversity is high along the West Fork Black River because of the elevational change.

Segment 1 - This river segment is dominated by mixed conifer and sprucefir forests and large alpine meadows. Willows along the stream provide a scenic backdrop for hiking and fishing.

Segment 2 - Segment 2 is dominated by mixed conifer forest and ponderosa pine. Riparian vegetation partly consists of Douglas-fir, spruce, ponderosa pine, willow, alder, and aspen.

#### **Land Ownership**

Segment 1 - 1.1 miles (120 acres) on private land. Remainder is national forest.

Segment 2 - All national forest.

### **Transportation**

Segment 1 - Vehicles can access this segment from Forest Road 116 and several old logging roads.

Segment 2 - Thompson Trail #629 parallels the northern one-quarter of this segment to West Fork Trail. This segment is also accessible by foot or horseback along West Fork Trail #628, which climbs along the steep canyon walls. West Fork Loop Trail #630 starts and ends where Thompson and West Fork Trails meet.

#### **Livestock Grazing**

Most of the West Fork Black River flows through the Black River Conservation Area, where livestock grazing does not occur. Only the southernmost end of Segment 2 is in the West Fork Allotment.

#### **Past Activities**

The flats above the river were thinned and logged in the 1990s.

#### **Special Land Uses**

West Fork Dispersed Campground is located just south of Segment 2.

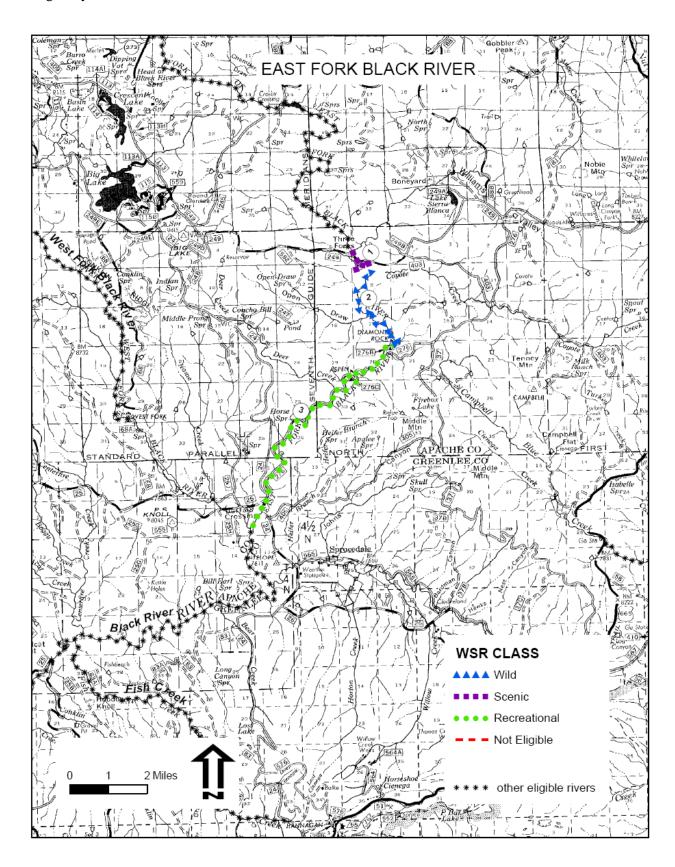
# **Special Management Designation**

Segment 2 is within the West Fork Black River Special Management Area, where motor vehicle use is restricted.

#### Other

Local users are from Eagar, Springerville, Alpine, St. Johns, Show Low, Pinetop-Lakeside, and other small towns. Regional users are from the Tucson and Phoenix urban areas.

# EAST FORK BLACK RIVER



## East Fork Black River

Is the River free flowing?

Yes or No

Yes

**Area of Comparison** 

Statewide

**Potential Outstandingly** 

Remarkable Values

Scenery, Recreation, Fish, Wildlife, Historic

**Eligible Segments** Segment 1 - Boneyard Creek to Coyote Creek

> Segment 2 - Coyote Creek to ¼ mile above Diamond Rock Campground Segment 3 - 1/4 mile above Diamond Rock Campground to confluence

with West Fork Black River

Classification and Length

Segment 1 - Scenic, 1.2 miles Segment 2 - Wild, 3.3 miles Segment 3 - Recreational, 8.2 miles

Changes from previous documents

North Fork East Fork Black River analyzed separately.

Remaining river split into 3 segments.

Portion of original Segment 1 (now Segment 2) classification changed

from Scenic to Wild.

Location The East Fork Black River originates at the confluence of Boneyard

> Creek and North Fork East Fork Black River and flows southeast for approximately 4½ miles to Diamond Rock Campground, where it then flows southwesterly to its confluence with the West Fork Black River.

**District** Alpine

Counties Apache, Greenlee (county boundary)

**Legal Description** Township/Range: T04, R28E; T05N, R28E; T05N, R29E; Gila and Salt

River Meridian

### **River-related Resources**

Scenery

Scenery is an Outstandingly Remarkable Value (ORV) because of the high visual quality, which has been demonstrated by the number of area photographs that have appeared in national and regional magazines.

Segment 1 is visible just as Forest Road 249 drops down into the river corridor from the east. A panoramic view opens up with its steep, forested canyon walls and the winding river below. The road then crosses the river downstream from Boneyard Creek. The Three Forks Area, a large wetland, is visible south of the bridge. Pictures of the canyon with its open grassy bottoms and streamside willows and alders have appeared in a number of

magazines, including Arizona Highways.

Segments 2 and 3 flow through a narrower portion of the river canyon where water rushes among boulders or glides through quiet pools. While Segment 2 is untouched by roads or other forest management activities, Segment 3 has a series of popular and well-developed campgrounds in a

shaded setting near the river.

#### Recreation

Recreation is an ORV because the recreational opportunities attract visitors from within and beyond the area of comparison.

Primary recreation opportunities along the East Fork Black River include camping, hiking, and fishing. Segment 1 includes a popular roadside stop with an interpretative kiosk that describes the unique features of the Three Forks Area. People picnic and play in the water here. Segment 2 provides a quiet hike along a primitive trail with many river crossings. The Segment 3 campgrounds, with their cool canyon setting, are always full during the warm, summer months. Many visitors come from California and Texas and other areas to camp and recreate in the canyon.

Geology

The geology of the stream is of volcanic origin. Basalt and andesite from the Datil Formation were deposited in large lava flows during the Quaternary and Tertiary periods. Between episodes of volcanic activity, sedimentary rocks were formed either as crudely-stratified sand and gravel deposits or mudflow-deposited breccia, sandstone, gravel, and unsorted fragmental units.

Fish

Fish habitat is an ORV because the river provides high quality habitat for native fish species.

Threatened fish species include Apache trout and loach minnow. Sensitive fish species include Sonora sucker and desert sucker.

Other native fish include speckled dace. Non-native fish include fathead minnow and rainbow and brown trout. Apache trout are stocked in Segment 3 by Arizona Game and Fish Department.

Wildlife

Wildlife species and habitat are ORVs because quantity and diversity of wildlife species and habitat.

Threatened wildlife species include Chiricahua leopard frog and Mexican spotted owl. Candidate wildlife species include Three Forks springsnail and New Mexico meadow jumping mouse. Sensitive wildlife species include narrow-headed gartersnake, northern goshawk, and California floater. The Mexican gray wolf has dispersed into the river area from its reintroduction site.

The diversity of vegetation and wildlife habitat has resulted in a great variety of wildlife, both aquatic and terrestrial. Elk, deer, bear, coyote, and fox can be seen along the East Fork Black River. The Mexican gray wolf hunts through here and one wolf pack has made the country around the river part of its territory. Bighorn sheep can occasionally be seen along canyon walls or coming to water on the river. In Segment 2, osprey and Cooper's hawk forage in the river or along the canyon. Lincoln sparrows may breed in the river corridor. Wild turkeys forage in the canyon bottom and roost in trees along the lower canyon slopes. Various raptors, including red-tailed and Cooper's hawks, may be observed.

The primary breeding site for Chiricahua leopard frog is found in the Three Forks wetlands (Segment 1). The Three Forks springsnail is also found in this wetland area. Other Three Forks wildlife species include narrowheaded gartersnake, New Mexican meadow jumping mouse, California floater, and White Mountains water penny beetle.

**Historic** 

Historic resources are an ORV because the variety of historic features found along the river segments.

Two 1930s Civilian Conservation Corps camps were located along the East Fork at Three Forks (Segment 1) and Buffalo Crossing (Segment 2). Because of the elevation, these were summer camps from which enrollees built roads and campgrounds and fought fires. A large, diamond-shaped rock in Segment 3 was used by early settlers and Forest rangers as a landmark (still present today). Along Segment 3 there are historic features built by the CCC, including three "Adirondack style" shelters at Diamond Rock Campground. The remains of a popular 1920s lodge are located near Diamond Rock.

**Prehistoric** 

Several lithic scatters from Mogollon culture hunting camps have been found along the lower river.

Hydrology

There are no dams or dikes. In the vicinity of Three Forks and Boneyard Creek (Segment 1), there are a series of fens and bogs.

Vegetation

Sensitive plant species along the river include White Mountains clover, Blumer's dock, and Goodding's onion.

Willows and alders line the river here and there along all segments. Grasses, clumps of thick sedges, and Blumer's dock, a red-rooted plant with large deltoid-shaped leaves, occur along the stream banks. Occasionally gooseberry, currant, and skunkbush are found along the river. Blue spruce and fir grow on the canyon walls in Segments 2 and 3 and near the river in the canyon bends where cold air settles in the winter. Large ponderosa pines and Douglas-firs grow in the river bottom along Segment 3

**Land Ownership** 

All national forest.

**Transportation** 

Segment 1 - Forest Road 249 crosses the East Fork Black River at Three Forks.

Segment 2 - Three Forks Trail #64 follows the East Fork Black River from Three Forks to Diamond Rock Campground.

Segment 3 - Forest Road 276 parallels the East Fork Black River and crosses it at Buffalo Crossing and Diamond Rock. Black River Trail #61 follows the East Fork Black River from Buffalo Crossing downstream to the Black River.

**Livestock Grazing** 

Livestock grazing is no longer authorized in most of the East Fork Black River canyon because of high recreation use, lack of sustainable forage, and sensitivity of the riparian area. However, grazing occurs for 2 weeks in the lower 2 miles of Segment 3 in the PS Allotment.

**Past Activities** 

Occasional suppression of small wildfires and some domestic livestock grazing. Limited timber harvesting has occurred only on a salvage basis.

**Special Land Uses** 

Licensed and permitted outfitters and guides conduct hunting and fishing trips in the river canyon. There are seven developed campgrounds along Segment 3.

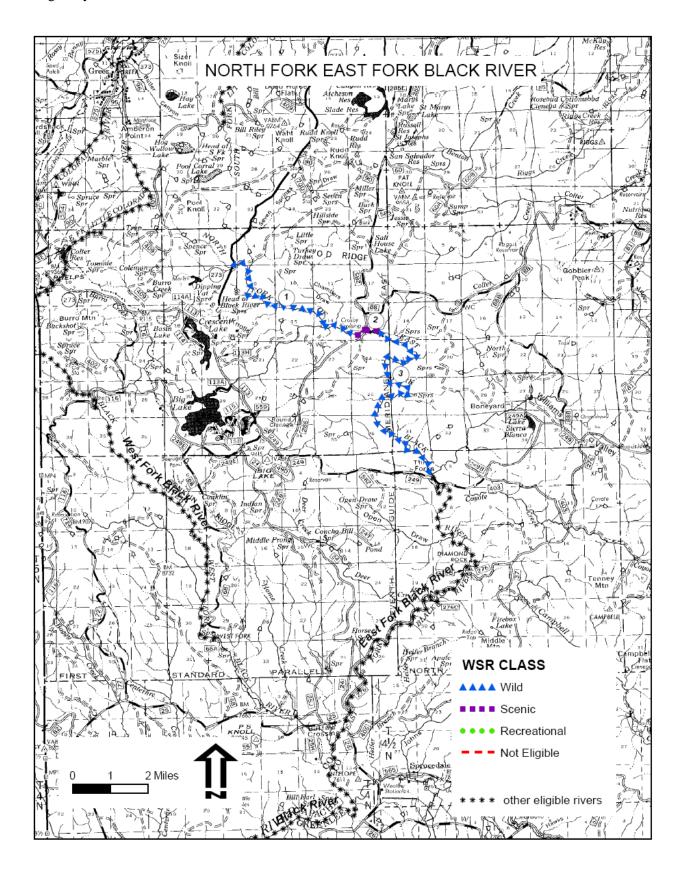
**Special Management Designation** 

All segments are within the East Fork Black River Special Management Area, where motor vehicle use is restricted.

Other

Recreation users come from the local area and statewide. Visitors from New Mexico, California, and Texas are common.

## NORTH FORK EAST FORK BLACK RIVER



#### North Fork East Fork Black River

Is the River free flowing?

Yes or No

Yes

Area of Comparison Statewide

Potential Outstandingly Remarkable Values

Scenery, Fish, Wildlife

Eligible Segments Segment 1 - State Highway 261 to ½ mile upstream of Crosby Crossing

Segment 2 - ½ mile upstream of Crosby Crossing to ½ mile downstream

of Crosby Crossing

Segment 3 - ½ mile downstream of Crosby Crossing to the confluence

with Boneyard Creek (Three Forks)

Classification and Length Segment 1 - Wild, 4.9 miles

Segment 2 - Scenic, 1.0 mile Segment 3 - Wild, 7.8 miles

**Changes from previous** 

documents

Segments 1 and 2 added to evaluation.

Segment 3 split from East Fork Black River evaluation. Segment 3 classification changed from Scenic to Wild.

**Location** The North Fork East Fork Black River arises near Pool Knoll and flows

southeast for approximately 13¾ miles to its confluence with Boneyard

Creek.

**Districts** Springerville, Alpine

**County** Apache

Legal Description Township/Range: T05N, R29E; T06N, R28E; T06N, R29E; Gila and

Salt River Meridian

#### **River-related Resources**

Scenery

Scenery is an Outstandingly Remarkable Value (ORV) because the scenery and visual attractions are diverse over the river segments.

The North Fork East Fork Black River is a unique river in that it flows through high-elevation grasslands. The White Mountains are the only location in Arizona with high-elevation grasslands. Elevations range from 8,300 to 9,100 feet. The river's headwaters are located south of Pool Knoll; the river flows southeasterly to the confluence with Boneyard Creek. Most of Segment 1 flows through wide-open, highelevation grasslands, but short sections are shaded by mixed conifer stands. Approximately ½ mile south of State Highway 261 the sights and sounds of traffic fade and the feeling of solitude dominates. Segment 2 traverses approximately 40 acres of private land and crosses Forest Road 285. All of Segment 2 is high-elevation grassland. Segment 3 flows through wide-open, high-elevation grasslands for approximately 2½ miles and then enters a deep, narrow canyon. The canyon is tree- and rock-lined, with occasional openings. The river flows through boulders of various sizes and glides through quiet pools. Segments 1 and 3 are untouched by roads and provide a solitary and unconfined experience.

Recreation

Very limited recreation occurs along the river segments. There are no developed trails. Hikers and hunters may occasionally walk along the river. Overland Trail #615 crosses the western end of Segment 1.

Geology

The geology of the stream is of volcanic origin. Basalt and andesite from the Datil Formation were deposited in large lava flows during the Quaternary and Tertiary periods. Between episodes of volcanic activity, sedimentary rocks were formed either as crudely-stratified sand and gravel deposits or mudflow-deposited breccia, sandstone, gravel and unsorted fragmental units.

Fish

Fish habitat is an ORV because the North Fork East Fork Black River provides high quality habitat for threatened and sensitive fish species.

Threatened fish species include loach minnow and its critical habitat. Sensitive fish species include Sonora sucker and desert sucker.

Other native fish species include speckled dace. Non-native fish species include brown trout and fathead minnow.

Wildlife

Wildlife habitat is an ORV because of its quantity, quality, and diversity.

Endangered wildlife species include Southwestern willow flycatcher. Threatened wildlife species include Chiricahua leopard frog and Mexican spotted owl. Candidate wildlife species include New Mexico meadow jumping mouse. Sensitive wildlife species include California floater, narrow-headed gartersnake, Arizona montane vole, water shrew, and northern goshawk. The Mexican gray wolf has dispersed into the river area from its reintroduction site.

The great variety of habitat types provides for high diversity and abundance of wildlife species including osprey and belted kingfisher. There are numerous raptor nesting sites along the river canyon in Segment 3.

Historic

Crosby Crossing (Segment 2) was the site of the home of Lorenzo and Molly Crosby, who ran a small ranch and store. When outlaws killed Lorenzo, Molly and their children moved to Greer, where Molly remarried and earned fame as Molly Butler, founder of the "oldest lodge in Arizona," established in 1910.

**Cultural** Several cultural sites are located on the slopes above the river.

**Hydrology** There are no structures along the river segments.

**Vegetation** Sensitive plant species along the river include Blumer's dock, Bebb's willow, White Mountains clover, and Goodding's onion.

Segment 1 - The vegetation is dominated by high-elevation grasses, with islands and fingers of mixed conifers, including Douglas-fir, blue spruce, and ponderosa pine.

Segment 2 - High-elevation grasses.

Segment 3 - High-elevation grasses grading into mixed conifers and willow and alder riparian vegetation.

The riparian areas include alder and willow associations.

**Land Ownership** 

Segment 2 flows through 40 acres of private land used for livestock grazing, just upstream from Crosby Crossing. The remainder is national forest.

**Transportation** 

Segment 1 - State Highway 261 defines the western end of the segment. Overland Trail #615 crosses the river ¼ mile east of the highway. Segment 2 - Forest Road 285 crosses Segment 2 at Crosby Crossing. Segment 3 - Numerous roads provide access to the lands outside the river corridor. Forest Road 249 crosses the East Fork Black River just downstream of this segment.

**Livestock Grazing** 

The Cross Bar, Udall, and Black River Allotments are located along the river segments.

**Past Activities** 

Limited timber harvesting has occurred on lands outside of the river corridor.

**Special Land Uses** 

Permitted outfitter and guide operations for hunting and fishing have been conducted along Segment 3.

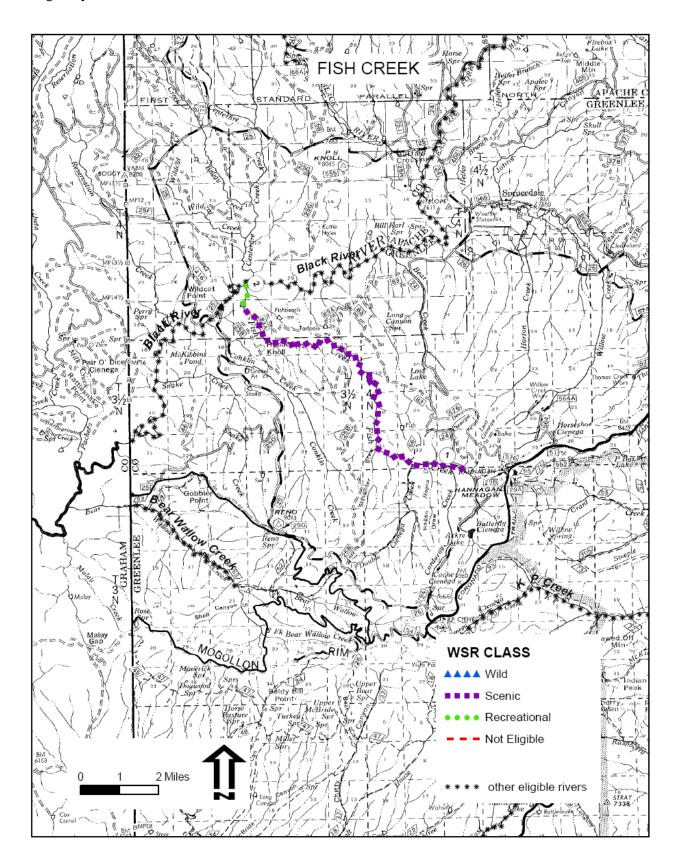
Salt River Basin North Fork East Fork Black River

Special Management Designation

All segments are within the East Fork Black River Special Management Area, where motor vehicle use is restricted.

Other None.

# FISH CREEK



### Fish Creek

Is the River free flowing?

Yes or No

Yes

Area of Comparison Statewide

Potential Outstandingly Remarkable Values

Scenery, Recreation, Fish, Wildlife

**Eligible Segments** Segment 1 - From Forest Road 24 to 0.1 miles above the fish barrier.

Segment 2 - From 0.1 miles above the fish barrier to the confluence with

the Black River.

Classification and Length Segment 1 - Scenic, 9.9 miles

Segment 2 - Recreational, 0.6 miles

**Changes from previous** 

documents

Scenery Outstandingly Remarkable Value (ORV) added.

Original river segment split to reflect the presence of a low, naturalized

fish barrier in Segment 2.

**Location** Fish Creek originates from Cache Cienega, south of Hannagan Meadow,

and is fed by Conklin and Double Cienega Creeks. It flows northwest

for approximately 14 miles to the Black River.

**District** Alpine

**County** Greenlee

Legal Description Township/Range: T03N, R29E; T03.5N, R28E; T04N, R28E; Gila and

Salt River Meridian

#### **River-related Resources**

**Scenery** Scenery is an ORV because of the diversity of views within the canyon.

Seasonal color variations augment the visual attractiveness.

Fish Creek is a perennial river confined within a deep canyon. The canyon walls are alternately rock-faced with boulders or densely forested with deep layers of needles and leaves. The rock faces are heavy with lichen, mosses, and cascading bunches of Porter's melicgrass. The canyon twists and turns with occasional flat, grassy benches. The rocky stream bottom creates pools for fish that reflect the canyon walls. In the fall, the canyon's oaks, willows, and vines reflect light in vivid yellows, oranges, and browns.

**Recreation** Recreation is an ORV because the opportunities attract visitors from

throughout and beyond the area of comparison.

Hiking, backpacking, and fishing are popular. The stream is managed for a non-motorized experience, so users find solitude and quiet. Camping sites

are limited to streamside benches.

Geology

The geology of the stream is volcanic in origin. Basalt and andesite from the Datil Formation were deposited in large lava flows during the Quaternary and Tertiary periods. Between episodes of volcanic activity, sedimentary deposits were formed, either as crudely-stratified sand and gravel deposits, or as mudflow-deposited breccia, sandstone, grave and unsorted fragmental units.

**Fish** 

Fish habitat is an ORV because of the high quality habitat for Apache trout.

Threatened fish species include Apache trout. Apache trout is a native, sport fish species.

Fish Creek is a designated recovery stream for the Apache trout, which occurs naturally only in the White Mountains of eastern Arizona. The lower ½ mile contains a low, naturalized rock dam or fish barrier to prevent non-native fish from swimming upstream and hybridizing or competing with the native Apache trout. The native speckled dace is also present. Non-native fish species include brown trout below the fish barrier.

Wildlife

Wildlife species and habitat are ORVs because of the unique variety of wildlife species and the high habitat diversity.

Threatened wildlife species include Mexican spotted owl. Candidate wildlife species include New Mexico meadow jumping mouse. Sensitive wildlife species include narrow-headed gartersnake, bald eagle, northern goshawk, water shrew, spotted bat, and possibly northern leopard frog. The Mexican gray wolf has dispersed into the river area from its reintroduction site.

Osprey nest in tall trees along the creek, primarily near the Black River. The New Mexico meadow jumping mouse, water shrew, and other small mammals find abundant habitat in the deep grassy benches and well-vegetated creek banks. Abert's and red squirrels make large cone caches under large trees along the canyon walls. Bear sign (scat and tracks) is common. Coyote, fox, and Mexican gray wolf pass through the canyon. An occasional mountain lion scrape is encountered along the canyon rim.

Other wildlife species in this area include sharp-shinned hawk, band-tailed pigeon, blue (dusky) grouse, turkey, flammulated owl, pine grosbeak, occult little brown bat, bobcat, long-tailed weasel, mule deer, and Rocky Mountain elk.

Historic

There is evidence of historic use (trash dumps) by hunters and cowboys in the canyon.

**Prehistoric** 

There are no known prehistoric resources.

Hydrology

There is a low, naturalized fish barrier near the upstream end of Segment 2.

76

Vegetation

Sensitive plant species in or near Fish Creek include Goodding's onion,

Blumer's dock, and White Mountains clover.

Because of its sinuosity and changing directions, the canyon supports a wide variety of vegetation types. Spruce and fir occupy the steepest and coldest sections and ponderosa pine the warmest sections. Mixed conifers with large Douglas-firs occur throughout the canyon on the wet canyon bottoms and the cooler north and east slopes. Poisonous water hemlock occurs sporadically. Willows and alders are found along the water's edge.

Common shrubs include golden currant, wild rose, and dogwood.

**Land Ownership** All national forest.

**Transportation** The upper end of the Segment 1 is accessed by Forest Road 24. The Fish

> Creek Trail #60 parallels Fish Creek to the Black River. Other trails in the area include Fishbench Trail #320, which enters Fish Creek canyon from the north. Double Cienega Trail #319 starts near the Bear Wallow Trailhead on Forest Road 25 and runs north to Fish Creek Trail.

**Livestock Grazing** Livestock grazing was recently reauthorized in Fish Creek canyon after

many years on non-use.

**Past Activities** Occasional suppression of small wildfires and some livestock grazing. The

timber is suitable for harvest but has been deferred.

**Special Land Uses** Outfitter-guided hunting and fishing trips have been conducted in the

canyon.

**Special Management** 

Segment 2 is within the Black River Special Management Area, where **Designations** motorized vehicle use is restricted. Both river segments are within Black

River Canyon Inventoried Roadless Area. The canyon is managed for a

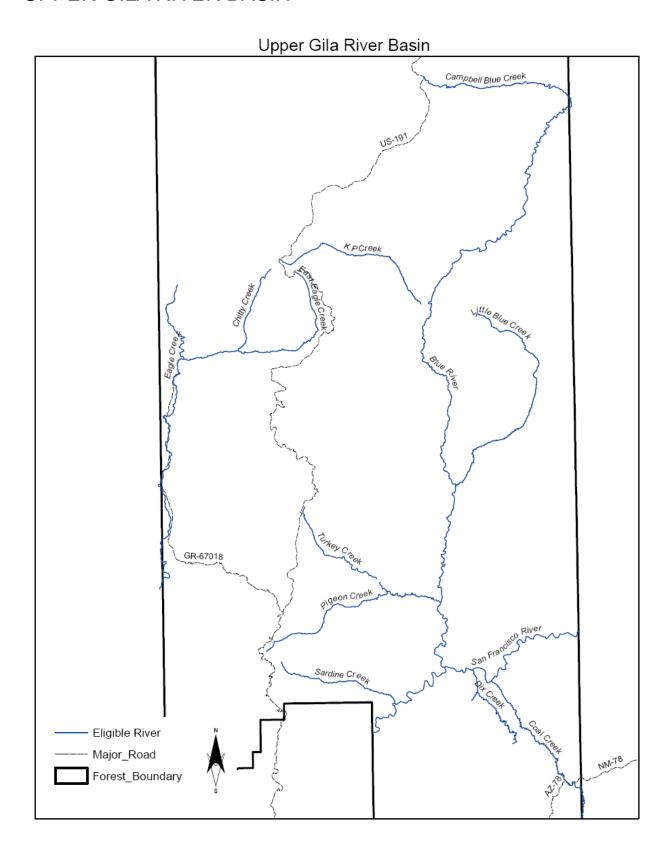
non-motorized experience.

Other This is a popular hiking destination for many summer users from across the

state and local communities.

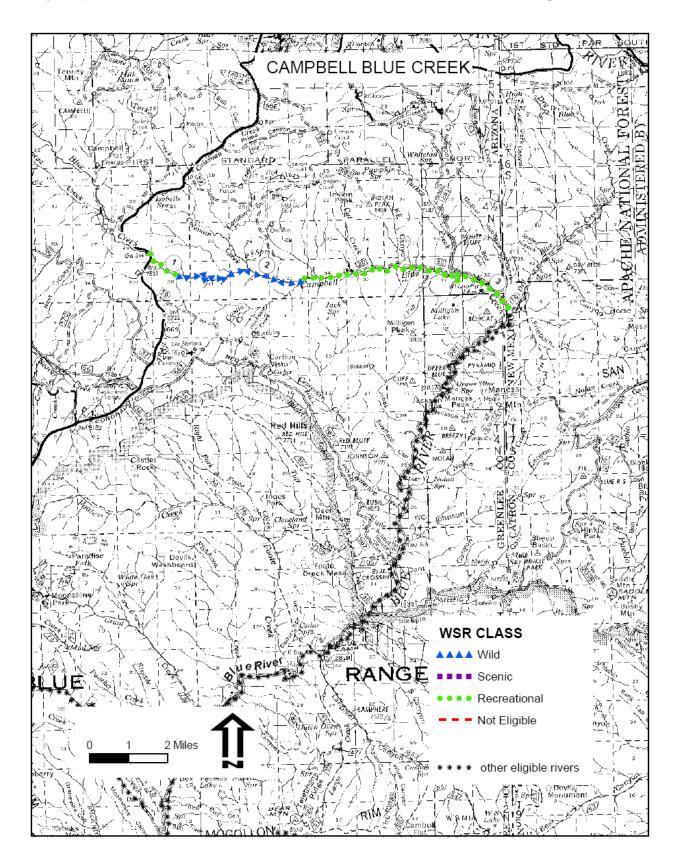
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### **UPPER GILA RIVER BASIN**



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## CAMPBELL BLUE CREEK



### Campbell Blue Creek

Is the River free flowing?

Yes or No

Yes

**Area of Comparison** 

Statewide

**Potential Outstandingly** 

**Remarkable Values** 

Scenery, Recreation, Fish, Wildlife, Vegetation

**Eligible Segments** 

Segment 1 - From U.S. Highway 191 downstream for 1.1 miles

Segment 2 - From 1.1 miles downstream of U.S. Highway 191 to the

confluence with Castle Creek

Segment 3 - From the Castle Creek confluence downstream to the

confluence with Dry Blue Creek

**Classification and Length** 

Segment 1 - Recreational, 1.1 miles

Segment 2 - Wild, 4.1 miles

Segment 3 - Recreational, 6.9 miles

Changes from previous

documents

Campbell Blue Creek has been analyzed separately from the Blue River.

Wildlife and Vegetation Outstandingly Remarkable Values (ORV)

added.

Location Campbell Blue Creek originates southwest of Alpine, Arizona, near

Middle Mountain. From its origin, it flows southeasterly for

approximately 17 miles to the confluence with Dry Blue Creek in New

Mexico.

**District** Alpine

County Greenlee

**Legal Description** Township/Range: T04N, R32E; T04.5N, R30E; T04.5N, R31E;

T04.5N, R32E; Gila and Salt River Meridian

#### **River-related Resources**

Scenery

Scenery is an ORV because of a remarkable  $\underline{mix}$  of landforms, vegetation, and colors.

A diversity of vegetation and landform textures, colors, and forms can be found along Campbell Blue Creek. Vegetation diversity is related to the canyon's orientation. The south-facing slopes are hot and dry with widely-spaced large ponderosa pines, Gambel oak, grasses, bare or dry lichendappled rocks, and scattered cacti, while the north-facing slopes are cooler and moister with dense mixed conifers and mossy or forb-covered rocks. The floodplain includes a mix of small dry and wet meadows and very large diameter conifers with riparian hardwood trees, shrubs, and vines that seasonally radiate rich autumn colors. Shrubs and seasonal wildflowers also abound. There are several rock formations, short box canyons, and rock spires in the canyon. From the bottom there are broken views of the towering rims. A seasonal waterfall on Fall Creek, to the south, may be seen from the primitive trail around the private land near the west end of Segment 3.

Recreation

Recreation is an ORV because the opportunities have the potential to attract visitors from within and beyond the area of comparison.

Primitive recreation opportunities along Campbell Blue Creek include horseback riding, hiking, camping, hunting, fishing, photography, wildlife viewing, and sightseeing. Segments 1 and 2 provide a challenging 1-2 day off-trail adventure through a remote area. There are several sites that could be used as base camps for exploring the side canyons and tributaries. Recreational use is currently low. Segment 3 includes dispersed, motorized campsites under the trees and shallow pools for water play or fishing. Recreational use is low to moderate, but some visitors return yearly.

Geology

The western portion consists of irregularly-shaped lava flows. These rocks are dark, fine-grained basalt and andesite with tuff and sediment layers. The older volcanic rocks, basalt and andesite, are extensively eroded. The rock layers may be inclined at varying angles due to block faulting and tilting. Locally, the lava rock surfaces may be decomposed into a sticky, plastic clay.

The eastern portion consists of fossil-bearing river and lake deposits of middle or early Pliocene age within the present drainage system valleys and related conglomerate, sand, silt, and clay.

**Fish** 

Fish species and habitat are ORVs because of the threatened fish species and its critical habitat.

Threatened fish species include loach minnow. Designated critical habitat occurs downstream of the Coleman Creek confluence. Sensitive fish species include longfin dace, Sonora sucker, and desert sucker.

Other native fish species include speckled dace. Non-native rainbow and brown trout are present in Segment 3.

Wildlife

Wildlife species are an ORV because of the diversity of special status species that are found in the river corridor.

Threatened wildlife species include Mexican spotted owl. The threatened Chiricahua leopard frog may be present Candidate wildlife species include New Mexico meadow jumping mouse. Sensitive wildlife species include bald eagle, American peregrine falcon, northern goshawk, Arizona Bell's vireo, narrow-headed gartersnake, Ferris' copper and four-spotted skipperling butterflies, and possibly northern leopard frog and Arizona toad (Segment 3). Campbell Blue Creek is within the primary recovery zone for the Mexican gray wolf.

The variety of aquatic and wildlife species present is a reflection of the diversity of vegetation and terrain that provides suitable habitats.

The riparian corridor contains habitat for important raptor prey species such as voles and mice. Raptors, such as red-tailed and Cooper's hawks, forage along the river segments. Wild turkey forage in the canyon bottom and roost in trees along the lower canyon slopes. Migratory song birds may be seen. Bear, coyotes, fox and bobcat, as well as mountain lion, elk, mule deer, white-tailed deer, javelina, beaver, and Albert's squirrel, frequent the canyon. The first release of the Mexican gray wolf in 1998 occurred nearby. Since then, wolf packs have used the area for hunting and denning.

The lower 10 miles of Campbell Blue Creek are part of the identified Blue River Complex Important Bird Area.

Historic

In the late 1800s several small cattle ranching homesteads were established along Campbell Blue Creek. Old structures, ruins, and scattered dump sites remain. At least one mature apple tree still survives on the forest west of the Luce Ranch.

**Prehistoric** 

Numerous prehistoric sites have been documented along Segment 3. Known sites suggest a preference for arable land and reliable water sources and are probably associated with the prehistoric Mogollon culture along the Blue River.

Hydrology

Campbell Blue Creek is intermittent above the confluence with Coleman Creek and perennial downstream. Flow varies greatly, depending on winter and summer rains and winter snow pack. The creek flows through a mix of fast riffles and short falls over bedrock boulders on steeper gradients and quiet pools on gentle gradients. Portions of Segment 2 have tight oxbows interspersed between wide, flat, grassy floodplains. There are numerous small side drainages, some quite narrow and rugged. Several small springs feed marshy bogs before the flow joins the creek. Flooding during spring run-off and after summer monsoons is common, turning the quiet creek into a raging torrent.

#### Vegetation

Vegetation is an ORV because of the diversity of species found within the river corridor.

Sensitive plant species include Blumer's dock, White Mountains clover, yellow lady's-slipper, and possibly Arizona alum root.

This river corridor is so ecologically diverse that the delineation of distinct vegetation types is difficult. There are stringers, inclusions, and transition zones nearly everywhere.

Campbell Blue Creek flows through an open montane meadow for approximately ¼ mile east of U.S. Highway 191. The stream banks are lined by bluegrass and redtop grass, while sunflower, checkermallow, and beardstongue flower in the adjacent bottoms during summer. Scattered small wet and dry meadows occur throughout the drainage. These areas are vegetated with many different species of grasses, sedges, rushes, horsetails, poison ivy, wild rose, and watercress. Less common plants, such as cardinal flower, water hemlock, dogwood, and honeysuckle, occur.

The upland vegetation along Segments 1 and 2 is primarily ponderosa pine forest on the gentle slopes and south-facing hillsides, with mixed conifer forest on the steeper north-facing slopes. Gambel oak occurs within the ponderosa pine forest. Very large ponderosa pines, Douglas-firs, southwestern white pines, white firs, and some blue spruce are plentiful in the channel bottom and on canyon slopes. Rocky mountain juniper is also common. Stately, old-growth ponderosa pines are found in several locations along Segments 2 and 3. As the elevation decreases in Segment 3, piñon pine, juniper, gray oak, mountain mahogany, buckbrush, and ceanothus, interspersed with ponderosa pine and perennial grasses, become dominant.

Woody riparian species in Segments 2 and 3 include narrowleaf cottonwood, large specimens of alder, Arizona walnut, and boxelder; various willow species, Rocky Mountain maple, and chokecherry. Occasionally, hops and Virginia creeper drape standing trees with bright summer green and brilliant autumn colors. In several locations healthy oldgrowth ponderosa pines are part of the cottonwood gallery.

### **Land Ownership**

Segments 1 and 2 are national forest. Approximately 1.2 river miles (17 percent) of Segment 3 are privately owned. The remainder of Segment 3 is national forest.

#### **Transportation**

Segment 1 - U.S. Highway 191 delineates the segment's west end. Forest Road 8860 parallels the creek to the north and is visible from the creek bottom.

Segment 2 - There is no road or trail access to this segment.

Segment 3 - Forest Road 30 parallels Campbell Blue Creek from the Luce Ranch to Forest Road 281. Forest Road 281 parallels the remainder of Campbell Blue Creek to its confluence with Dry Blue Creek. A primitive trail skirts the Luce Ranch.

#### **Livestock Grazing**

Grazing is authorized in Segment 1 and on a small portion of the upper end of Segment 2 in the Lower Campbell Blue allotment. Livestock may be present between July 15 and October 31. There are numerous fences in the grazed section. Livestock grazing is not authorized in the remainder of Segment 2 and all of Segment 3 because of the sensitivity of the riparian area.

#### **Past Activities**

Fuel wood is regularly harvested in Segment 3. Timber has been sparsely harvested within portions of Segments 1 and 3. Some broadcast burning has occurred along Segment 1 and the upper portion of Segment 2. Private properties in Segment 3 were historically cleared for agriculture and irrigation water was diverted from the creek.

#### **Special Land Uses**

Licensed and permitted outfitter and guides operate hunting trips in the area.

Segment 3 - An overhead power line crosses and parallels much of this segment. Both private properties have old water diversions at their west (upstream) ends, with irrigation ditches running onto private lands. Neither diversion impedes the free-flowing character of this segment. There is a special use authorization for a spring and water line for the private lands in section 32, T04.5N, R32E.

### Special Management Designations

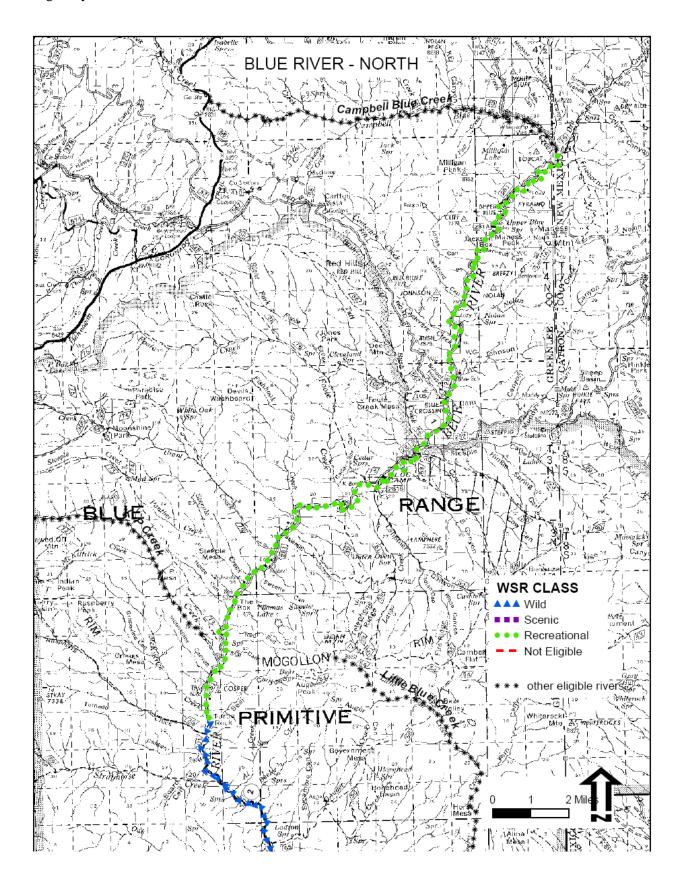
Campbell Blue Creek is adjacent to Campbell Blue, Mother Hubbard, and Centerfire Inventoried Roadless Areas.

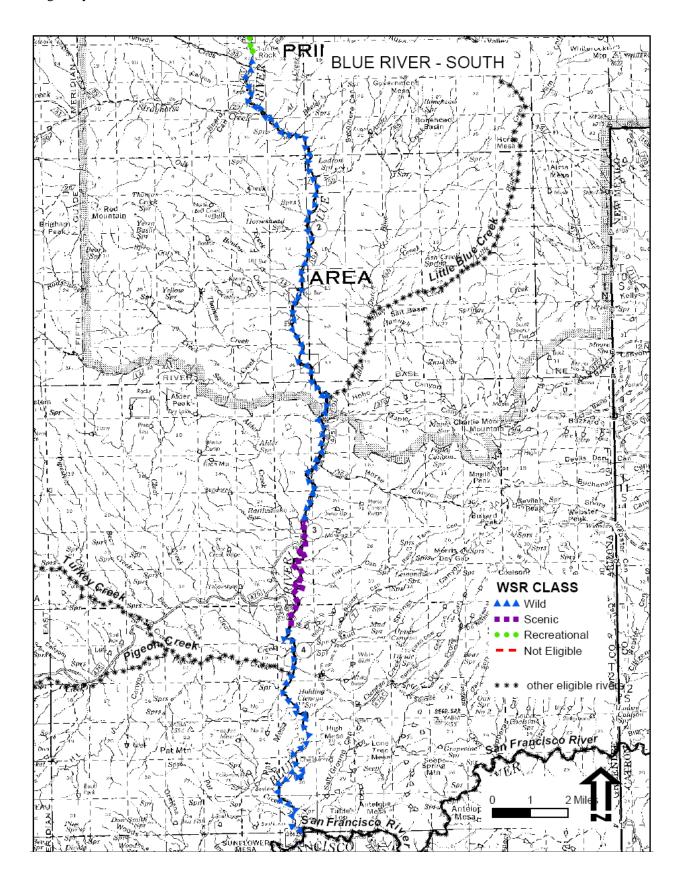
#### Other

Local users are from towns across the White Mountains and nearby towns in New Mexico. Regional users are from Phoenix, Tucson, Albuquerque, and beyond.

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## BLUE RIVER





#### Blue River

Is the River free flowing?

Yes or No

Yes

Area of Comparison

Statewide

Potential Outstandingly Remarkable Values

Scenery, Recreation, Fish, Wildlife, Historic, Prehistoric, Vegetation

Eligible Segments

Segment 1 - Blue River from the confluence of Campbell Blue and Dry Blue Creeks downstream through the Smith Place to Bear Creek.

Segment 2 - From Bear Creek downstream to ¼ mile above the Blue River Trailhead.

Segment 3 - From ¼ mile above the Blue River Trailhead to ½ mile

below Forest Road (FR) 475.

Segment 4 - From ½ mile below FR 475 to the confluence with the San

Francisco River

**Classification and Length** 

Segment 1 - Recreational, 25.1 miles Segment 2 - Wild, 16.0 miles Segment 3 - Scenic, 4.2 miles Segment 4 - Wild, 8.1 miles

Changes from previous documents

Blue River analyzed separately, without Campbell Blue Creek.

The original Segment 2 (Scenic) was split into three segments. Segments 2 and 4 were reclassified as Wild. Segment 3, between the Blue River Trailhead (XXX Ranch) and ½ mile below FR 475, remains Scenic.

**Location** The Blue River starts at the confluence of Campbell Blue and Dry Blue

Creeks. It flows southerly for approximately 53 river miles to the San

Francisco River.

**Districts** Alpine, Clifton

**County** Greenlee

Legal Description Township/Range: T01N, R30E; T01N, R31E; T02N, R30E; T02N,

R31E; T03N, R30E; T03N, R31E; T04N, R31E; T04N, R32E; Gila and Salt River Meridian. T01S, R31E; T02S, R30E; T02S, R31E; Gila and

Salt River Meridian

#### **River-related Resources**

#### Scenery

Scenery is an Outstandingly Remarkable Value (ORV) because of the diversity of landforms, colors, and vegetation found along the river corridor.

The Blue River landscape includes a diversity of textures, colors, and forms which create striking views throughout the river corridor. The river bottom is littered with boulders, rocks, and sediments from the side canyons. The river corridor varies from wide floodplains separated by narrow box canyons to wide or narrow sandy river bottoms to relatively narrow canyons with towering canyon walls.

Slumps and fault lines are visible in places like the Blue Box, near an unusable bridge. The river cuts through dark lava flows, red walls, white volcanic ash, and rock-studded conglomerate. In places, water flows through narrow, almost slot-like reaches and elsewhere through wide and meandering floodplains.

#### Recreation

Recreation is an ORV because the recreation opportunities are diverse and attract visitors from throughout and beyond the area of comparison. Many visitors are attracted because of the remote and primitive setting.

Segment 1 - Recreation opportunities include picnicking, camping, swimming, and hiking. There are also opportunities for mountain biking along FR 281, which parallels and crosses the Blue River. Many trailheads provide non-motorized access to the Blue Range Primitive Area.

Segment 2 - Most of this segment is in the Blue Range Primitive Area. Hiking, backpacking, camping, horse packing, and hunting all occur along this river segment and its canyon corridors. This portion of the Blue River area is a very remote, vast, and undeveloped so it offers a primitive recreation experience unlike elsewhere in the state.

Segment 4 - Advanced canoeing and kayaking are possible during high runoff seasons starting from FR 475 (Juan Miller road).

#### Geology

The upper portion consists of fossil-bearing river and lake deposits of middle or early Pliocene age within the present drainage system and related conglomerate, sand, silt, and clay.

The lower portion includes Tertiary and Cretaceous age acid volcanic rocks. These irregularly-shaped flows consist of light-colored andesites which locally include layers of tuff and agglomerate. These are intensely eroded, faulted, and broken. There are several rock formations and box canyons along the Blue River.

Fish

Fish species and habitat are ORVs because the Blue River contains one of the highest number of native fish species. This habitat is crucial to the survival of many native fish species.

Threatened fish species include loach minnow. The Blue River has been identified in as critical habitat for the loach minnow. Sensitive fish species include longfin dace, desert sucker, and Sonora sucker.

Other native fish include speckled dace. Non-native fish present are flathead minnow, red shiner, channel and flathead catfish, mosquitofish, common carp, yellow bullhead, and rainbow and brown trout.

Wildlife

Wildlife species and habitat are ORVs because of the diversity of species and habitats that are found along the river corridor.

Threatened wildlife species include Mexican spotted owl (Segment 1). Candidate wildlife species include western yellow-billed cuckoo and Mexican gartersnake. Sensitive wildlife species include bald eagle (winter), American peregrine falcon (summer), common black-hawk, Arizona Bell's vireo, narrow-headed gartersnake, Arizona toad, and lowland leopard frog. The Blue River is within the primary recovery zone for the Mexican gray wolf.

The threatened Chiricahua leopard frog was once common in the Blue River but is currently not present. Segment 4 is within Recovery Unit 7, San Francisco Management Area of the Chiricahua Leopard Frog Recovery Plan.

The Blue River area provides habitat for Rocky Mountain elk, mule deer, Coues deer, bighorn sheep, black bear, javelina, Gambel's and Montezuma quail, coyote, coatimundi, fox, bobcat, and mountain lion. Wild turkey forage in places along the canyon bottom and roost along the lower slopes of canyon walls. The river corridor could function as a travel corridor for the endangered jaguar expanding its range from southeast Arizona.

The Blue River serves as a migration corridor for neotropical migrants and is part of the identified Blue River Complex Important Bird Area.

**Historic** 

Historic resources are an ORV because of the length of post-settlement use in the area.

The Blue River area was notorious for cattle rustling in the mid-1800s. By the late 1800s several small cattle ranching homesteads were established along the Blue River. Some of these historic ranch headquarters on Segment 1 are still used today and remind visitors of the area's ranching heritage. The Forest Service was also present along the Blue. The Baseline Ranger Station, established circa 1908, was located on the southern boundary of the Blue Range Primitive Area. Evidence of high-quality Civilian Conservation Corps construction work can be seen in Upper Blue and Blue Crossing Campgrounds.

#### **Prehistoric**

Prehistoric resources are an ORV because the river corridor contains extensive evidence of occupation and use by the Mogollon culture.

Potentially thousands of prehistoric sites occur along the Blue River, which figured significantly in the prehistoric Mogollon culture. During prehistoric times, the area around the river provided all life-sustaining resources including game animals, wild resources, reliable water for agriculture, building materials, and suitable locations for habitation sites. Typical sites include rock shelters, shard and lithic scatters, pit-house villages, and rock masonry room blocks or pueblos.

Hydrology

The Blue River is perennial but flow varies greatly, depending on winter and summer rains. Flooding is common during spring run-off and summer monsoons and can turn the quiet river into a raging torrent.

There are several minor diversions on private lands that are used for irrigation.

The effects of several large fires in the upper reaches of four main tributaries in the early 2000s increased sediment flow and deposition, but because of the river canyon's size, the floodplain is always changing.

Vegetation

Vegetation is an ORV because of the great diversity of vegetation communities associated with the changes in elevation, including the deciduous shrub and tree canopies along the river segments. The diversity of riparian species attracts a wide variety of avian species.

The river corridor contains a diverse mix of species including alligator and one-seed juniper and occasional piñon and ponderosa pine. Grey and Emory oak, mountain mahogany, Wright's silktassel, buckbrush, desert ceanothus, and some mesquite also occur. Perennial bunchgrasses can be abundant within the canyon, with five different species of grama grasses present. There are also more than seven species of mully grasses.

Riparian vegetation includes narrowleaf and Fremont cottonwood, Arizona sycamore, boxelder, Arizona walnut, alder, various willows, ash, hoptree, and seepwillow (not a true willow). The tree canopy is not continuous, but broken up by vertical rock canyons that eventually open to gentler slopes. Wildflowers bloom in the spring and after summer rains, while sand-loving grasses such as vine mesquite, creeping muhly, and sand dropseed are found in the river's shifting floodplain.

**Land Ownership** 

Approximately 7.7 miles (32 percent) of Segment 1 are privately owned. The remainder of Segment 1 and all of Segments 2, 3, and 4 are national forest.

#### **Transportation**

Segment 1 - FR 281 parallels the Blue River from its origin to the private lands in section 14, T02N, R30E, providing vehicle access to almost the entire segment. Trails that leave the Blue River in Segment 1 and provide access to the Blue Range Primitive Area include Hinkle Trail #30, South Canyon Trail #53, Foote Creek Trail #76, Lanphier Trail #52, Sawmill Trail #39, Old Sawmill Trail #115, Grant Creek Trail #75, and Steeple Trail #73.

Segment 2 - Access from the west is from U.S. Highway 191 via trails. These trails include Raspberry Trail #35, Strayhorse Trail #20, and A D Bar Trail #14. Access from the east is via Forest Road 104 and the Baseline Trail #310. Blue River Trail #101 parallels the river from the trailhead at XXX Ranch north to the Smith Place. Other trails that leave the Blue River Trail include Cow Flat Trail #55, Winter Cabin Trail #706, HU Bar Trail #540, Baseline Trail #310, Little Dutch Blue Trail #541, Horse Canyon Trail #36, and AC Trail #349.

Segment 3 - Access from the west is from U.S. Highway 191 via the Juan Miller Road/FR475 and FR 475C.

Segment 4 - Trails that leave the river segment below the road crossing include Bohom Trail #561 and Pat Mountain Trail #576.

Segments 2, 3, and 4 are closed to motorized vehicle use, except the FR 475 crossing.

#### **Livestock Grazing**

Livestock grazing has not been authorized along the Blue River since the mid-1990s because of the sensitivity of the riparian area.

#### **Past Activities**

Occasional suppression of small wildfires and some livestock grazing.

#### **Special Land Uses**

The Blue River corridor is used by licensed and permitted outfitters and guides for hunting and fishing.

Segment 1 - The Upper Blue Crossing and Blue Crossing Campgrounds are located along this segment. A power line parallels entire segment. There is one special use authorization for a water diversion structure near the Grant Creek trailhead.

Segment 3 - There is a cable car across the Blue River just upstream of Forest Road 475 and a stream gauging station just downstream of the road.

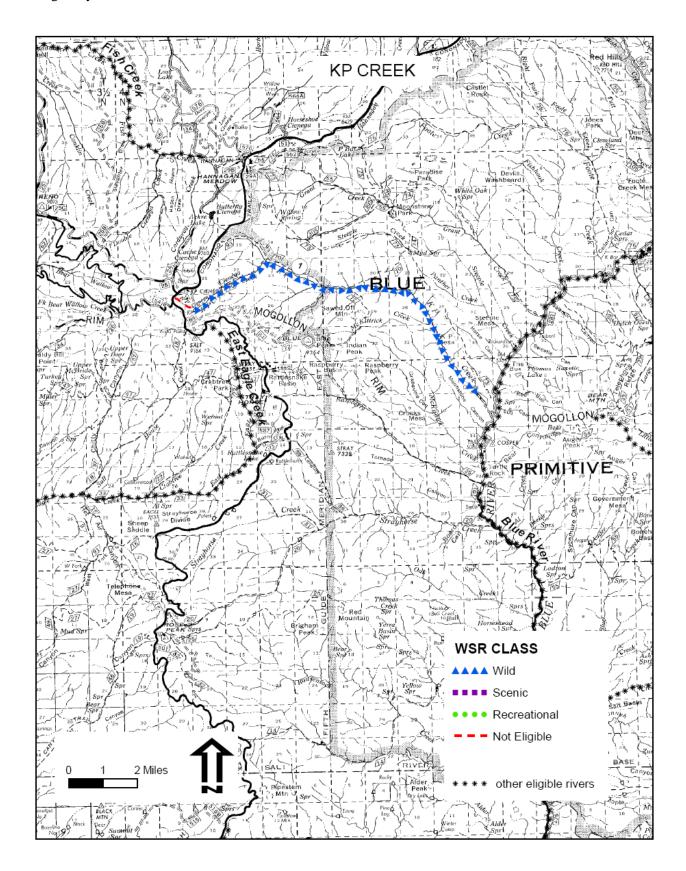
#### Special Management Designations

The Blue River is adjacent to Centerfire, Nolan, and Pipestem Inventoried Roadless Areas (IRA); adjacent to and within Blue Range Primitive Area (13 miles within); and within and adjacent to Lower San Francisco IRA.

#### Other

The Blue River is a popular year-round destination for users from across the state, region, and local communities of Morenci, Clifton, Duncan, and Safford, Arizona and Glenwood and Reserve, New Mexico.

# KP CREEK



#### KP Creek

Is the River free flowing?

Yes or No

Yes

**Area of Comparison** Statewide

**Potential Outstandingly Remarkable Values** 

Scenery, Recreation, Fish, Wildlife

**Eliqible Segment** One segment, from the KP Trailhead to the private land boundary in

section 11, T02N, R30E, approximately 1 mile northwest of the Blue

River.

**Classification and Length** 

Wild, 11.3 miles

Changes from previous

documents

Recreation, Fish, Wildlife Outstandingly Remarkable Values (ORV)

added.

Location KP Creek originates near the Mogollon Rim close to U.S. Highway 191.

From its origin it flows generally east and southeast for approximately

13 miles to the Blue River.

**District** Alpine

County Greenlee **Legal Description** 

Township/Range: T02N, R30E; T03N, R29E; T03N, R30E; Gila and

Salt River Meridian

#### **River-related Resources**

Scenery Scenery is an ORV because of the lush vegetation, steep canyon walls, and

tumbling waterfalls.

The scenery is widely diverse. Upper KP Creek rushes down a steep, thickly-forested canyon with lush riparian vegetation. Two small waterfalls

can be seen from KP Trail, which follows the creek downstream.

Additional waterfalls are found about 7 miles downstream, but these are located off the trail. Grassy flats contrast with large, old-growth ponderosa pines and provide views into deep pools and across to canyon walls.

Recreation

Recreation is an ORV because the recreation opportunities attract visitors from throughout the area of comparison and have the potential to attract

visitors from beyond the area of comparison.

KP Creek provides opportunities for hiking, fishing, backpacking, and horseback riding. A popular day-hike destination is two small waterfalls about 3 miles downstream from KP Cienega. KP Creek also provides

access to the Blue Range Primitive Area.

Geology

KP Creek lies within the Colorado Plateau province, although more severely faulted and disturbed than the plateau to the north. All of the exposed rocks that are either volcanic or epiclastic (eroded volcanic) in origin. Rocks of upper KP Creek are basalt or andesite of Quaternary and Tertiary age. These gradually give way to epiclastic volcanic sediments ranging from mudflow breccia to volcanic conglomerate, sandstone, and siltstone. The slopes above KP Creek near its confluence with the Blue River have exposed Tertiary-aged rhyolite ash-flow tuff overlain by buff to gray colored, gently tilted beds of conglomerate formation.

Fish

Fish habitat is an ORV because of the high quality habitat that supports native fish species.

Sensitive fish species include desert sucker.

KP Creek provides habitat for native speckled dace, non-native rainbow trout, and hybrid Apache trout. KP Creek is a future release site for the threatened Gila trout.

Wildlife

Wildlife species and habitat are ORVs because of the diversity and quantity of wildlife species and the quality of the habitat.

Threatened wildlife species include Mexican spotted owl. Sensitive wildlife species include bald eagle, American peregrine falcon, narrow-headed gartersnake, Ferris' copper and four-spotted skipperling butterflies, and, possibly northern leopard frog. KP Creek is within the Mexican gray wolf primary recovery zone.

The dense vegetation and large down logs make the river corridor prime habitat for black bear and blue (dusky) grouse, both species which require high quality habitat. Bobcat and mountain lion frequent this unroaded, wild country.

Mule deer can be spotted; Coues deer are occasionally seen in the lower elevations. Several Mexican spotted owl pairs have territories along the river corridor and in the late winter and early spring pairs may be heard calling. The riparian corridor provides habitat for small mammals such as voles and mice, important owl prey species. Migratory birds that use high-elevation riparian areas include MacGillivray's, red-faced, and yellow warblers. The yellow-breasted chat may use the lower elevation portion of the river corridor. Other wildlife species along the river segment include Rocky Mountain elk, Abert's squirrel, long-tailed weasel, and coyote.

The lower 5 miles of KP Creek are part of the identified Blue River Complex Important Bird Area.

Historic

There are no known historic resources.

**Prehistoric** 

There are no known prehistoric resources.

Hydrology

There are no dams or diversions. The State of Arizona has classified the entire river segment as a "unique water" because of its high water quality.

100

Vegetation

Sensitive plant species include Goodding's onion and Blumer's dock.

A variety of vegetation occurs on the canyon slopes because of differing slope aspects. On north-facing slopes, the vegetation consists of spruce, Douglas-fir, and ponderosa pine with side drainages possibly supporting Goodding's onion. On the south-facing slopes, vegetation is primarily oak, mountain mahogany, and juniper and piñon. Riparian vegetation in upper KP Creek includes alder, willow, and other uncommon plants such as baneberry, sweet cicely, cow parsnip, twinberry, false-hellebore, and monkshood. Blumer's dock is found along the upper portion of the creek. Lower KP Creek contains boxelder, Arizona walnut, and Arizona sycamore with wild grape and Virginia creeper vines climbing some of the trees. Emory oak, California buckbrush, and some poison ivy are also found along the lower canyon bottom. The 2005 KP wildfire affected several spots along the creek; here regrowth demonstrates plant succession.

**Land Ownership** 

All national forest.

**Transportation** 

Forest Road 55 provides access to upper KP Creek and KP Trail #70. KP Trail follows the first 5 miles of the creek until it climbs out of the canyon to the northeast. North Fork KP Trail #93, Blue Lookout Trail #71, and McKittrick Trail #72 branch from KP Trail along the river segment.

**Livestock Grazing** 

Livestock grazing is not currently authorized in the pastures that encompass the upper half of KP Creek canyon. Winter-only grazing is authorized in the lower half of the canyon in the KP Summer Allotment.

**Past Activities** 

Occasional suppression of wildfires and livestock grazing.

**Special Land Uses** 

Licensed and permitted outfitters and guides conduct hunting and fishing trips along KP Creek. KP Cienega Campground is within ¼ mile of the river segment.

**Special Management Designations** 

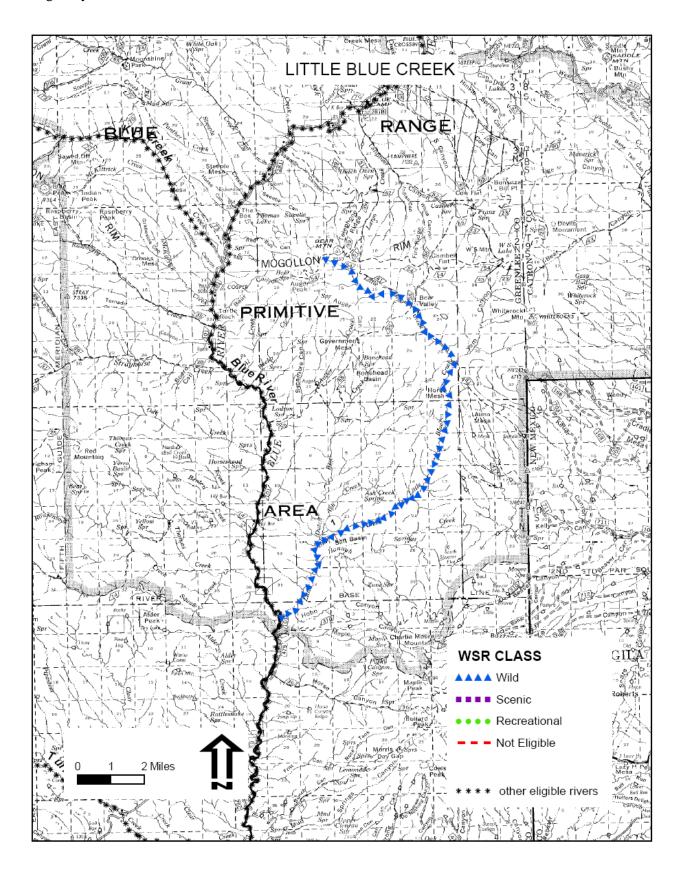
Part of KP Creek is within the Blue Range Primitive Area, which is managed as wilderness. A portion of the creek also flows through lands that were included in the 1971 Presidential Recommendation for the Blue Range Wilderness and were identified in the 1987 Forest Plan as potential additions to the Blue Range Primitive Area.

Other

KP Creek and KP Cienega Campground are popular recreation destinations with many summer users and fall hunters from local communities, across the state, and beyond.

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# LITTLE BLUE CREEK



# Little Blue Creek

# **Evaluation Form for Wild & Scenic River Eligibility Analysis**

# SUMMARY OF ELIGIBILITY ANALYSIS SOUTHWESTERN REGION Apache-Sitgreaves National Forests

**River:** Little Blue Creek

**Segment:** Headwaters to the Blue River, 18.4 miles

Evaluated By: Clifton District

**Date:** 11/9/2007

# **Evaluation Step**

# Free-flowing/ORV

Yes

# I. ELIGIBILITY ANALYSIS

## A. Free-flowing

Existing or flowing in a natural condition without impoundment, diversion, straightening, rip rapping, or other modification of the waterway. The existence of low dams, diversion works or other minor structures does not automatically disqualify the segment for designation. A river segment below or between impoundments may also be considered.

# Discussion: Little Blue Creek is free-flowing and is in a natural condition.

B. <u>Scenery</u> Yes

Do the landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features or attractions? (When analyzing scenic values, additional factors-such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed-may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.)

Discussion: The area of comparison is the Clifton District.

Scenery is a value because of the diversity of landscapes along the creek. Landscapes range from high mountain meadows to an incised narrow canyon to a semi-slot canyon.

# C. Recreation

<u>Free-flowing/ORV</u> Yes

- Are recreational opportunities popular enough or have the potential to be popular enough to attract visitors from throughout or beyond the region of comparison? (River-related opportunities could include, but are not limited to, sightseeing, wildlife observations, camping, photography, hiking, fishing, hunting and boating. Visitors are willing to travel long distances to use the river resources for recreational purposes.)
- Are recreational opportunities unique or rare within the region?
- Are interpretive opportunities exceptional or have the potential to attract visitors from outside the region of comparison?
- Does the river provide or have the potential to provide settings for national or regional usage or competitive events?

Discussion: The area of comparison is the Clifton District.

Recreation is a value because the recreation and solitude opportunities attract visitors from beyond the area of comparison. There is a diversity of recreation opportunities in a remote and primitive setting.

D. <u>Geology</u>

• Does the river or river corridor contain one or more example of a geologic feature, process or phenomenon unique or rare within the region of comparison? (The feature(s) may be in an unusually active stage or development, represent a "textbook" example and/or represent a unique or rare combination of geologic features-erosional, volcanic, glacial or other geologic structures.)

Discussion: The area of comparison is the Clifton District. There are no unique geologic features along Little Blue Creek.

#### E. Fish

(Fish values may be judged on the relative merits of fish populations, habitat, or a combination of these conditions.)

- Is the river a nationally or regionally important producer of resident and/or anadromous fish species? (Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river provide exceptionally high quality habitat for fish species indigenous to the region of comparison? (Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District. There are no unique fish values along Little Blue Creek. Native fish species include longfin dace, speckled dace, Sonora sucker, and desert sucker.

F. Wildlife No

(Wildlife values may be judged on the relative merits of either terrestrial or aquatic populations, habitat or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous wildlife species? (Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river or river corridor provide exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species? (Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District. There are no unique wildlife values along Little Blue Creek.

Free-flowing/ORV No

# Free-flowing/ORV No

## G. Heritage Resources – Historic

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting history).

 Does the river or river corridor contain a site or feature associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region? A historic site or feature, in most cases, is 50 years old or older and is eligible for the national register of historic places.

Discussion: The area of comparison is the Clifton District. There are no known historic resources along Little Blue Creek.

### H. Heritage Resources – Pre-Historic

No

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting prehistory).

• Does the river or river corridor have unique or rare characteristics or exceptional human interest value; represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare sacred purposes, and is eligible for the national register of historic places?

Discussion: The area of comparison is the Clifton District. There are no known prehistoric resources along Little Blue Creek.

### I. Vegetation/Ecology

No

(Vegetative and ecological values may be judged on the relative merits of either populations or communities, or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous plant species? (Of importance are species considered to be unique or populations of federal or state listed or candidate threatened, endangered, or sensitive species. Diversity and number of species area also important.)
- Does the river or river corridor contain nationally or regionally important plant communities? (Communities are exceptionally high quality, unusual or critical communities such as oldgrowth.)

Discussion: The area of comparison is the Clifton District. There are no known vegetation or ecology values along Little Blue Creek.

# Free-flowing/ORV No

- J. Other Similar Values
  - Consider values such as (but not limited to) hydrology, paleontology, and botany. Include criteria.

Discussion: No other values were identified for Little Blue Creek.

## II. ANALYSIS OF ELIGIBILITY COMPONENTS

If Item I.A. and one or more other items above are checked "YES": River Area is eligible for designation.

Conclusion: Little Blue Creek is eligible for designation as a Wild and Scenic River.

#### III. CLASSIFICATION

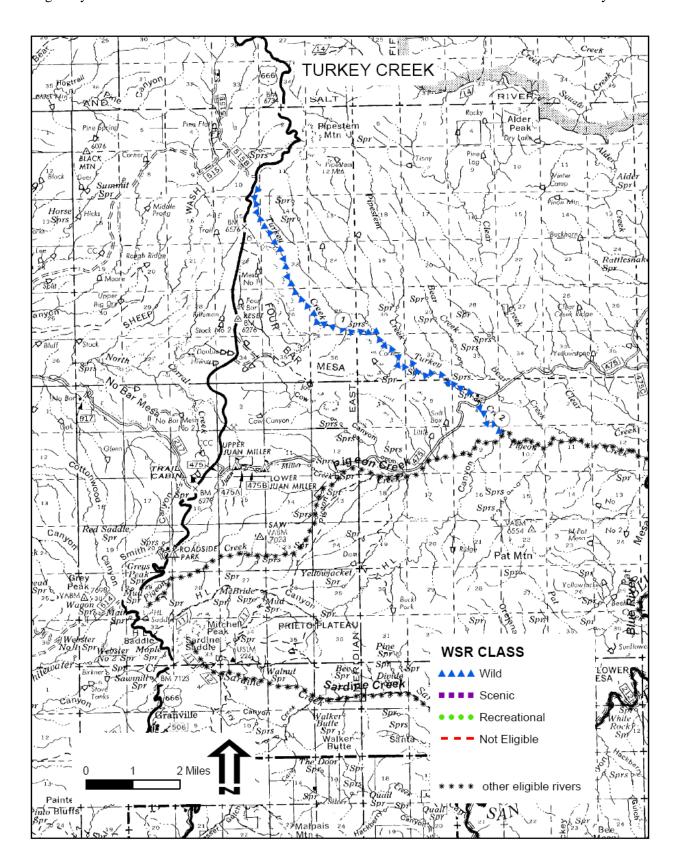
If river is eligible, what is the classification? Refer to Table 2 in the 1982 Wild and Scenic River Interagency Guidelines for the criteria used to determine classification.

X	Wild - Entire segment
	Scenic
	Recreational

Rationale: The entire stretch of Little Blue Creek is eligible for Wild river classification because there are no dams or diversions, there is no development along the creek, the only access is by foot or horseback, and the creek is entirely within the Blue Range Primitive Area.

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# TURKEY CREEK



# Turkey Creek

# **Evaluation Form for Wild & Scenic River Eligibility Analysis**

# SUMMARY OF ELIGIBILITY ANALYSIS SOUTHWESTERN REGION Apache-Sitgreaves National Forests

**River:** Turkey Creek

**Segment 1:** From the headwaters to the upper T Links Ranch private land boundary, 8.2 miles **Segment 2:** From the lower T Links Ranch private land boundary to Pigeon Creek, 1 mile

Evaluated By: Clifton District

**Date:** 11/9/2007

# **Evaluation Step**

# Free-flowing/ORV

Yes

No

# I. ELIGIBILITY ANALYSIS

### A. Free-flowing

• Existing or flowing in a natural condition without impoundment, diversion, straightening, rip rapping, or other modification of the waterway. The existence of low dams, diversion works or other minor structures does not automatically disqualify the segment for designation. A river segment below or between impoundments may also be considered.

# Discussion: Both segments of Turkey Creek are free-flowing and are in a natural condition.

# B. <u>Scenery</u>

Do the landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features or attractions? (When analyzing scenic values, additional factors-such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed-may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.)

Discussion: The area of comparison is the Clifton District. There are no unique scenery values along Turkey Creek.

### C. Recreation

- Free-flowing/ORV Yes
- Are recreational opportunities popular enough or have the
  potential to be popular enough to attract visitors from
  throughout or beyond the region of comparison? (River-related
  opportunities could include, but are not limited to, sightseeing,
  wildlife observations, camping, photography, hiking, fishing,
  hunting and boating. Visitors are willing to travel long distances
  to use the river resources for recreational purposes.)
- Are recreational opportunities unique or rare within the region?
- Are interpretive opportunities exceptional or have the potential to attract visitors from outside the region of comparison?
- Does the river provide or have the potential to provide settings for national or regional usage or competitive events?

Discussion: The area of comparison is the Clifton District.

Recreation is a value because Segment 2 provides a unique recreation opportunity that has the potential to attract visitors from throughout and beyond the area of comparison. This segment contains several falls and drop-offs that make the canyon unhikable, but would allow for a high quality canyoneering opportunity for experienced enthusiasts.

D. Geology

• Does the river or river corridor contain one or more example of a geologic feature, process or phenomenon unique or rare within the region of comparison? (The feature(s) may be in an unusually active stage or development, represent a "textbook" example and/or represent a unique or rare combination of geologic features-erosional, volcanic, glacial or other geologic structures.)

Discussion: The area of comparison is the Clifton District. There are no unique geologic features along Turkey Creek.

Free-flowing/ORV

No

# **Evaluation Step**

### F. Fish

(Fish values may be judged on the relative merits of fish populations, habitat, or a combination of these conditions.)

- Is the river a nationally or regionally important producer of resident and/or anadromous fish species? (Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river provide exceptionally high quality habitat for fish species indigenous to the region of comparison? (Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District. There are populations of native longfin (FS sensitive species) and speckled dace in Turkey Creek, but they are not unique.

F. Wildlife Yes

(Wildlife values may be judged on the relative merits of either terrestrial or aquatic populations, habitat or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous wildlife species? (Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river or river corridor provide exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species? (Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District.
Wildlife habitat and populations are values because both segments support populations of lowland leopard frog, a Forest Service sensitive species.

## G. Heritage Resources – Historic

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting history).

 Does the river or river corridor contain a site or feature associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region? A historic site or feature, in most cases, is 50 years old or older and is eligible for the national register of historic places.

Discussion: The area of comparison is the Clifton District. There are no known historic resources along Turkey Creek.

## H. Heritage Resources – Prehistoric

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting prehistory).

• Does the river or river corridor have unique or rare characteristics or exceptional human interest value; represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare sacred purposes, and is eligible for the national register of historic places?

Discussion: The area of comparison is the Clifton District.

Prehistoric resources are a value because unique prehistoric resources are known to exist along Segment 1. The potential for additional prehistoric resources is very high.

# Free-flowing/ORV No

Yes

# Free-flowing/ORV No

## J. Vegetation/Ecology

(Vegetative and ecological values may be judged on the relative merits of either populations or communities, or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous plant species? (Of importance are species considered to be unique or populations of federal or state listed or candidate threatened, endangered, or sensitive species. Diversity and number of species area also important.)
- Does the river or river corridor contain nationally or regionally important plant communities? (Communities are exceptionally high quality, unusual or critical communities such as oldgrowth.)

Discussion: The area of comparison is the Clifton District. There are no known vegetation or ecology values along Turkey Creek.

## J. Other Similar Values

No

• Consider values such as (but not limited to) hydrology, paleontology, and botany. Include criteria.

Discussion: No other values were identified for Turkey Creek.

## II. ANALYSIS OF ELIGIBILITY COMPONENTS

If Item I.A. and one or more other items above are checked "YES": River Area is eligible for designation.

Conclusion: Turkey Creek is eligible for designation as a Wild and Scenic River.

#### III. CLASSIFICATION

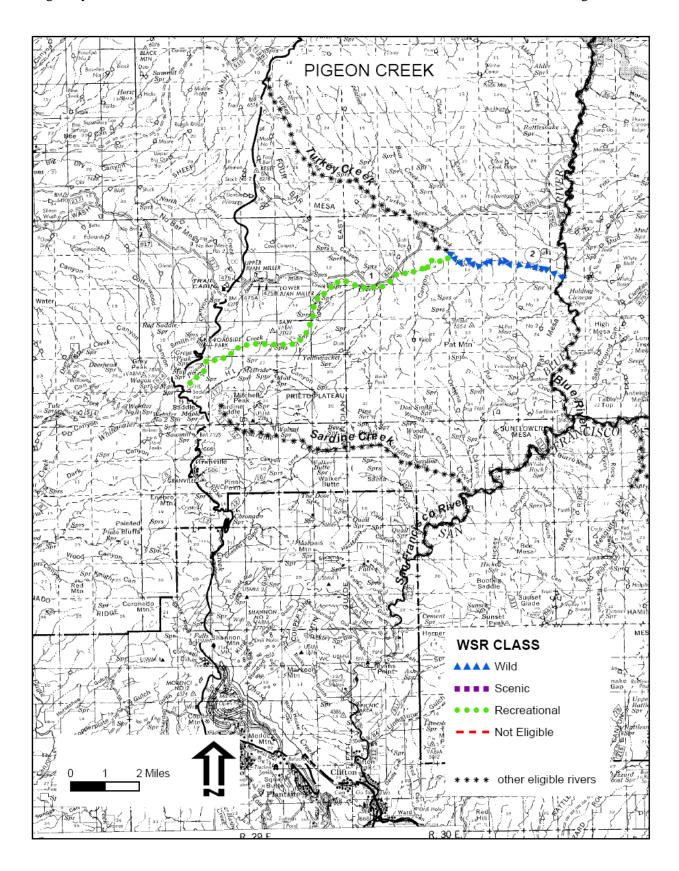
If river is eligible, what is the classification? Refer to Table 2 in the 1982 Wild and Scenic River Interagency Guidelines for the criteria used to determine classification.

X	Wild - Segments 1 and 2
	Scenic
	Recreational

Rationale: Segments 1 and 2 are eligible for Wild river classification because there are no dams or diversions, there is no development along the segments, and there is no road access to the river segments.

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# PIGEON CREEK



# Pigeon Creek

Is the River free flowing?

Yes or No

Yes

Area of Comparison Statewide

Potential Outstandingly Prehistoric

Remarkable Value

Eligible Segments

Segment 1 - Headwaters to Turkey Creek

Segment 2 - Turkey Creek to the confluence with the Blue River

Classification and Length

Segment 1 - Recreational, 10.3 miles

Segment 2 - Wild, 4.8 miles

**Location** Pigeon Creek originates near U.S. Highway 191 north of HL Saddle and

flows east for 16 miles through riparian areas and a steep canyon to the

confluence with the Blue River.

District Clifton
County Greenlee

Legal Description Township/Range: T02S, R29E; T02S, R30E; T02S, R31E; Gila and

Salt River Meridian

### **River-related Resources**

**Scenery** The creek passes through a diversity of textures, colors, and forms

contributed by the canyon's trees, shrubs, and stream-side vegetation. Steep and rough canyon, badland-looking areas, and orange and red sandstone walls are three of the different landscapes the creek passes through.

**Recreation** Primary recreation opportunities include hunting, hiking, and horseback

riding. Recreation use is generally low.

**Geology** The river segment includes fossil-bearing river and lake deposits of middle

or early Pliocene age within the present drainage system and related conglomerate, sand, silt, and clay. The far western portion consists of irregularly-shaped lava flows. These rocks are dark-colored, fine-grained vesicular basalt and andesite with interbedded sediments and tuff. The older volcanic rocks, basalt and andesite, are extensively eroded. The rock layers may be inclined at the varying angles due to block faulting and tilting. Locally, lava rock surfaces may be decomposed into a sticky, plastic

clay.

Fish Sensitive fish species include longfin dace, Sonora sucker, and desert

sucker.

Pigeon Creek also supports native speckled dace.

## WSR Eligibility Report Eligibility Evaluations

Wildlife

Candidate species include western yellow-billed cuckoo. Sensitive wildlife species along Pigeon Creek include Arizona toad, spotted bat, common black-hawk, and Arizona Bell's vireo. Pigeon Creek is also potential habitat for the sensitive lowland leopard frog.

The Pigeon Creek area and surrounding uplands support Sanborn's longnosed bat, occult little brown bat, mule deer, white-tailed deer, turkey, javelina, black bear, coyote, Montezuma quail, ferruginous hawk, and mountain lion.

Historic

No historic sites have been recorded along the river segment. However, near the Blue River confluence, evidence of early homesteading and ranching activities may be present.

**Prehistoric** 

Prehistoric resources are an Outstandingly Remarkable Value (ORV) because the river corridor contains important evidence of human occupation and use.

Segment 1 - Several prehistoric sites associated with the Mogollon culture have been recorded in this area and include artifact scatters, single room structures, room blocks, and rock art sites. Much of segment 1 has not been inventoried.

Segment 2 - Has not been inventoried, but there is a high potential for cultural resources.

Hydrology

Perennial surface water in Pigeon Creek starts where the creek bed runs closest to the Juan Miller Road (Forest Road 475). Surface water becomes ephemeral between the two water falls. Perennial surface flow resumes below the second falls. The creek again becomes ephemeral at its lower end, creating an effective barrier between Pigeon Creek and the Blue River. Water flows through the Pigeon Creek system for about 5 months, depending on winter moisture and summer rains.

Vegetation

The major vegetation types are ponderosa pine forest, Madrean pine-oak woodland, semi-desert grassland, and interior chaparral. The ponderosa pine type occurs on the north slopes at higher elevations along the southwestern boundary of the watershed and is dominated by ponderosa pine, piñon pine, and alligator juniper. Understory vegetation is composed of bottlebrush squirreltail, sideoats grama, Arizona cottontop, agave, scrub oak, mountain mahogany, Wright's silktassel, and Gambel oak. Interior chaparral is found at higher elevations on the south-facing slopes. Major species are mountain mahogany, ceanothus, Wright's silktassel, and scrub oak. At lower elevations within the watershed, the Madrean pine-oak woodland and semi-desert grassland dominate. South slopes within the woodland are characterized by piñon pine, alligator juniper, oak, a variety of shrubs, sideoats grama, curly mesquite, hairy grama, bull grass, and blue grama.

Overstory riparian vegetation along Pigeon Creek is dominated by Arizona sycamore, alder, ash, and Arizona oak. Creek terrace vegetation is similar but includes alligator juniper.

**Land Ownership** 

There are approximately 68 acres of private land (0.64 river miles) along Segment 1. The remainder is national forest.

WSR Eligibility Report Eligibility Evaluations Upper Gila River Basin Pigeon Creek

**Transportation** Segment 1 - Vehicle access is from the Juan Miller Road, which runs close

to the creek for 3 miles. Pigeon Trail #317, Pigeon Loop Trail #301, and Pigeon Connection Trail #318 provide access to upper Pigeon Creek. Corral Trail #577 crosses Pigeon Creek west of Turkey Creek.

Segment 2 - Pat Mesa Trail #467 crosses the Pigeon Creek near the Blue

River.

Livestock Grazing Pigeon Creek flows through the Double Circle, Pigeon, and Sandrock

Allotments. The creek is crossed by several fences.

Past Activities None.

Special Land Uses T Links Ranch has a road permit in section 13, T02S, R29E.

Special Management Designation

Most of the creek is in Mitchell Peak Inventoried Roadless Area.

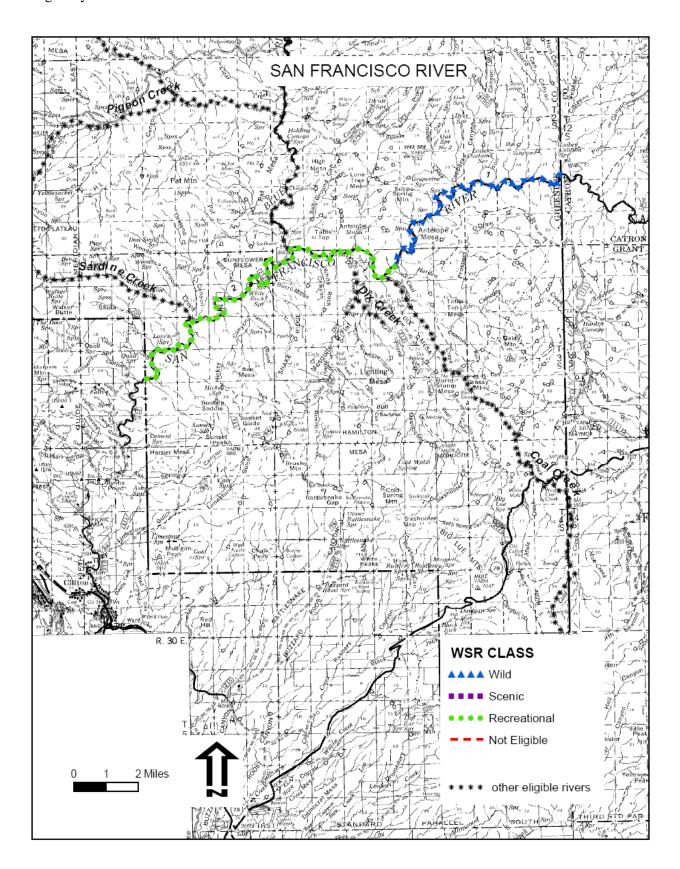
Other Local users are from Safford, Duncan, Clifton, and Morenci, Arizona, and

Glenwood and Reserve, New Mexico. Regional users are from Tucson,

Phoenix, and Albuquerque.

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# SAN FRANCISCO RIVER



# San Francisco River

Is the River free flowing?

Yes or No

Yes

Area of Comparison Statewide

Potential Outstandingly Remarkable Values

Segment 1 - Scenery, Recreation, Fish, Wildlife, Vegetation

Segment 2 - Recreation, Fish, Wildlife

**Eligible Segments** Segment 1 - From the Arizona/New Mexico state line downstream to

Harden Cienega Creek

Segment 2 - From Harden Cienega Creek downstream to the forests

boundary

Classification and Length Segment 1 - Wild, 9.0 miles

Segment 2 - Recreational, 15.0 miles

Location The San Francisco River originates in Williams Valley, northwest of

Alpine, flows east into New Mexico, and then south. It eventually turns

and flows west back into Arizona where it joins the Gila River

southwest of Clifton.

District Clifton
County Greenlee

Legal Description Township/Range: T02S, R31E; T02S, R32E; T03S, R30E; T03S,

R31E; Gila and Salt River Meridian

## **River-related Resources**

Scenery Scenery is an Outstandingly Remarkable Value (ORV) because the scenic

qualities are extremely high with great variety and distinctiveness.

The San Francisco River has a variety of landscapes providing a diversity of textures, colors, and forms created by the river's streamside vegetation and geological formations. The rugged canyon walls, combined with pools,

riffles, and riparian vegetation, are distinctive.

**Recreation** Recreation is an ORV because the river corridor attracts visitors from

within and beyond the area of comparison.

The recreational activities include water play, seasonal advanced canoeing, hunting, and fishing. Recreation use is generally low. Frisco Camp, a dispersed camping area, is located near the eastern end of Segment 2.

#### Geology

About two-thirds of the eastern portion of the river includes irregularly-shaped lava flows. These rocks are dark-colored, fine-grained vesicular basalt and andesite with layered sediments and tuff. The older volcanic rocks, basalt and andesite, are extensively eroded. The rock layers may be inclined at varying angles due to block faulting and tilting. Locally, the lava rock surfaces may be decomposed into a sticky, plastic clay.

The western portion of the river includes Tertiary and Cretaceous-age acid volcanic rocks. These irregularly-shaped flows consist of light-colored andesites that locally include layers of tuff and agglomerate. These are intensely eroded, faulted, and broken.

**Fish** 

Fish species are an ORV because the diversity of native species.

Endangered fish species that potentially occur in the river (currently found in tributaries) include Gila chub. Threatened fish species include loach minnow. Sensitive fish species include longfin dace, Sonora sucker, and desert sucker.

Other native fish species include speckled dace. Non-native fish species include red shiner, fathead minnow, mosquitofish, common carp, flathead catfish, and channel catfish.

Wildlife

Wildlife species and habitat are ORVs because of the diversity of special status species that are found along the river corridor.

Threatened wildlife species include Chiricahua leopard frog. Candidate wildlife species include western yellow-billed cuckoo and Mexican gartersnake. Sensitive wildlife species include bald eagle, narrow-headed gartersnake, Arizona toad, lowland leopard frog, common black-hawk, zone-tailed hawk, and American peregrine falcon. Segment 1 is within Recovery Unit 7, San Francisco Management Area of the Chiricahua Leopard Frog Recovery Plan.

The San Francisco River also provides habitat for mountain lion, white-tailed deer, javelina, bear, and bighorn sheep. Bird species include ferruginous hawk, quail, common merganser, mallard, turkey, band-tailed pigeon, and dove.

The San Francisco River is part of the identified Blue River Complex Important Bird Area.

**Historic** 

Segment 1 - Historic activity along the San Francisco River includes early cattle ranching, homesteading, and mining, primarily along the western portion of this segment. To the east, the river corridor narrows and is bordered by steep, rugged cliffs.

Segment 2 - Historic period sites are known to be present along the river corridor, but no formal recording has yet been conducted. Sites would include evidence of early cattle ranching, homesteading, and mining.

WSR Eligibility Report Eligibility Evaluations

#### **Prehistoric**

Segment 1 - The San Francisco River is located within the vast area once occupied by the prehistoric Mogollon culture. This river valley is one of several in the semi-arid Southwest with optimal conditions for agricultural pursuits. However, much of Segment 1 runs through a narrow steep-sided canyon. Access to the river from the canyon rim is difficult. Survey of the river corridor from the Martinez Ranch east to the Arizona/New Mexico state line located a few sites along the river itself. Typical sites include rock shelters and rock art panels. Sites are expected along the canyon rim, which has not been inventoried.

Segment 2 - Archeological sample survey has recorded the presence of several prehistoric Mogollon sites along the cliffs bordering this river segment. It is certain that complete inventory would identify numerous others. The San Francisco River valley is one of several in this semi-arid region which provided optimal conditions and locations for agricultural pursuits. Several access routes to the river are present. It is along such river valleys that the largest population densities occurred. Site types include lithic scatters (some possible dating to the Archaic period), rock shelters, rock art panels, pithouse villages, small masonry room blocks, and multi-roomed pueblos. These sites represent long-term prehistoric occupation and utilization of the San Francisco River corridor and surrounding area. All sites, except a few, possibly Archaic lithic scatters, are associated with the Mogollon Culture.

## Hydrology

The 24-mile stretch of river drops approximately 700 feet from the Arizona/New Mexico state line to the national forests boundary. The river bottom is 200-500+ feet wide and at flood stage water fills the entire channel up to 20 feet deep. During normal flows, the river meanders with some braiding through the canyon bottom. The average depths are 8-20 inches, with the width varying from 30 to 100 feet. The median flow above the Blue River confluence is 70 cubic feet per second.

## Vegetation

Vegetation is an ORV because of the diversity of vegetation communities associated with a semi-desert river system.

The vegetation communities consist of mixed broadleaf riparian woodland, semi-desert grassland, and, Madrean pine-oak woodland. Where deeper soils exist, the canyon floor is occupied by mesquite, woody shrubs, and herbs with widely scattered tree species such as cottonwood, Goodding's willow, Arizona sycamore, hackberry, alder, and seepwillow. Along the channel edges, riparian vegetation consists of boxelder, seepwillow, alder, Arizona sycamore, hackberry, cottonwood, willow, grasses, forbs, and shrubs.

Immediately upon leaving the canyon floor, low scrubs and grasses dominate the landscape. Prickly pear cactus, creosote bush, catclaw acacia, and Spanish-dagger accent the predominantly grass landscape. Upland mesa vegetation consists primarily of grama grass with small inclusions of blackjack oak and scrub oak on the side hills and canyon bottoms. Madrean pine-oak woodland occurs on north-facing slopes and at higher elevations.

### **Land Ownership**

The river is located primarily on national forest land. There is a 144-acre private parcel (0.36 river miles) at the Martinez Ranch along Segment 2.

## **Transportation**

Segment 1 - Non-mechanized use only. There are no trails or roads that provide access to this river segment. Segment 1 begins approximately 2.1 miles above the Martinez Ranch.

Segment 2 - Vehicle access to Segment 2 is from Forest Road 212, which leads to the Martinez Ranch and then parallels, and crosses, Segment 2 downstream to the forests boundary. The Hickey Springs Trail #311 leaves the river segment to the south.

The river is closed to vehicle use from where Forest Road 212 meets the river at the Martinez Ranch upstream to the Arizona/New Mexico state line.

Livestock Grazing There are several grazing allotments along the San Francisco River -

Pleasant Valley, Wildbunch, Copperas, Hickey, Harden Cienega, and a

very small portion of Sardine.

Past Activities Historic mining activities.

Special Land Uses The Arizona Department of Water Resources has a rain gauge and a stream

gauge on Segment 2. Two large power lines cross the San Francisco River

immediately east of Segment 1 in New Mexico.

Special Management Designations

Segment 1 is within the Lower San Francisco Inventoried Roadless Area (IRA). Segment 2 is within or adjacent to Lower San Francisco, Sunset,

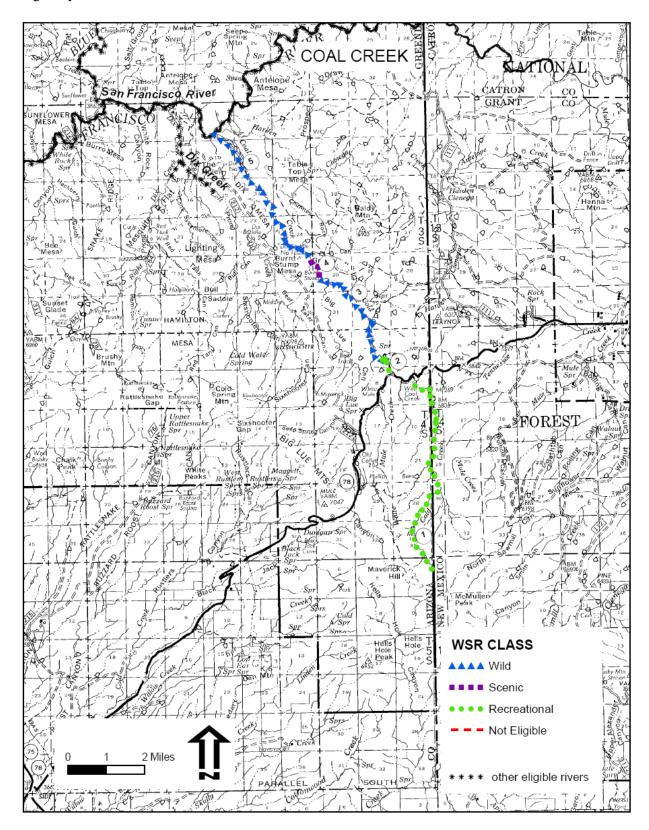
and Mitchell Peak IRAs.

Other Local users are from Safford, Duncan, Clifton, and Morenci, Arizona, and

Glenwood and Reserve, New Mexico. Regional users are from Tucson,

Phoenix, and Albuquerque.

# COAL CREEK



## Coal Creek

# **Evaluation Form for Wild & Scenic River Eligibility Analysis**

# SUMMARY OF ELIGIBILITY ANALYSIS SOUTHWESTERN REGION **Apache-Sitgreaves National Forests**

**River:** Coal Creek

**Segment 1:** Headwaters north to ¼ mile south of Highway 78, 6.9 miles Segment 2: 1/4 north of Highway 78 to 1 mile north of Highway 78, 0.8 miles

**Segment 3:** 1 mile north of Highway 78 to \( \frac{1}{4} \) mile south of the power lines, 4.2 miles Segment 4 ½ mile south of the power lines to ½ mile north of the power lines, 0.6 miles **Segment 5:** ½ mile north of the power lines to the San Francisco River, 5.4 miles

Evaluated By: Clifton District

**Date:** 11/9/2007

# **Evaluation Step**

# Free-flowing/ORV

Yes

## I. ELIGIBILITY ANALYSIS

## A. Free-flowing

• Existing or flowing in a natural condition without impoundment, diversion, straightening, rip rapping, or other modification of the waterway. The existence of low dams, diversion works or other minor structures does not automatically disqualify the segment

for designation. A river segment below or between impoundments may also be considered.

Discussion: All identified segments of Coal Creek are freeflowing and are in a natural condition. The Highway 78 road crossings are not included because there are culverts in the streambed and rip-rap along the banks.

## B. Scenery

No

Do the landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features or attractions? (When analyzing scenic values, additional factors-such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed-may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.)

Discussion: The area of comparison is the Clifton District. There are no unique scenery values along Coal Creek.

# C. Recreation

- Are recreational opportunities popular enough or have the potential to be popular enough to attract visitors from throughout or beyond the region of comparison? (River-related opportunities could include, but are not limited to, sightseeing, wildlife observations, camping, photography, hiking, fishing, hunting and boating. Visitors are willing to travel long distances to use the river resources for recreational purposes.)
- Are recreational opportunities unique or rare within the region?
- Are interpretive opportunities exceptional or have the potential to attract visitors from outside the region of comparison?
- Does the river provide or have the potential to provide settings for national or regional usage or competitive events?

Discussion: The area of comparison is the Clifton District.

Recreation is a value because Coal Creek presents a unique opportunity for horseback riders to traverse an entire river corridor. This opportunity has the potential to attract visitors from throughout and beyond the area of comparison.

# D. Geology

 Does the river or river corridor contain one or more example of a geologic feature, process or phenomenon unique or rare within the region of comparison? (The feature(s) may be in an unusually active stage or development, represent a "textbook" example and/or represent a unique or rare combination of geologic features-erosional, volcanic, glacial or other geologic structures.)

Discussion: The area of comparison is the Clifton District. There are no unique geologic features along Coal Creek.

# Free-flowing/ORV Yes

No

### G. Fish

(Fish values may be judged on the relative merits of fish populations, habitat, or a combination of these conditions.)

- Is the river a nationally or regionally important producer of resident and/or anadromous fish species? (Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river provide exceptionally high quality habitat for fish species indigenous to the region of comparison? (Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District. Fish habitat is a value because Segments 2, 3, 4, and 5 are likely habitat for the endangered Gila chub.

F. Wildlife Yes

(Wildlife values may be judged on the relative merits of either terrestrial or aquatic populations, habitat or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous wildlife species? (Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river or river corridor provide exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species? (Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District.

Wildlife species and habitat are values because Segments
2, 3, 4, and 5 support one of three known populations of
the threatened Chiricahua leopard frog. These segments
are within Recovery Unit 7, San Francisco Management
Area of the Chiricahua Leopard Frog Recovery Plan.
The entire river corridor also provides habitat for
migratory neotropical birds.

Yes

Free-flowing/ORV

## G. Heritage Resources – Historic

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting history).

 Does the river or river corridor contain a site or feature associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region? A historic site or feature, in most cases, is 50 years old or older and is eligible for the national register of historic places.

Discussion: The area of comparison is the Clifton District.

Historic resources are a value because Segment 1 includes pits that were used to make charcoal for smelting operations at the nearby copper mine.

## H. Heritage Resources – Prehistoric

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting prehistory).

• Does the river or river corridor have unique or rare characteristics or exceptional human interest value; represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare sacred purposes, and is eligible for the national register of historic places?

Discussion: The area of comparison is the Clifton District. There are no known prehistoric resources along Coal Creek.

# Free-flowing/ORV Yes

No

# Free-flowing/ORV No

## K. Vegetation/Ecology

(Vegetative and ecological values may be judged on the relative merits of either populations or communities, or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous plant species? (Of importance are species considered to be unique or populations of federal or state listed or candidate threatened, endangered, or sensitive species. Diversity and number of species area also important.)
- Does the river or river corridor contain nationally or regionally important plant communities? (Communities are exceptionally high quality, unusual or critical communities such as oldgrowth.)

Discussion: The area of comparison is the Clifton District. There are no unique vegetation or ecology values along Coal Creek.

## J. Other Similar Values

No

 Consider values such as (but not limited to) hydrology, paleontology, and botany. Include criteria.

Discussion: No other values were identified for Coal Creek.

## II. ANALYSIS OF ELIGIBILITY COMPONENTS

If Item I.A. and one or more other items above are checked "YES": River Area is eligible for designation.

Conclusion: Coal Creek is eligible for designation as a Wild and Scenic River.

# Free-flowing/ORV

## III. CLASSIFICATION

If river is eligible, what is the classification? Refer to Table 2 in the 1982 Wild and Scenic River Interagency Guidelines for the criteria used to determine classification.

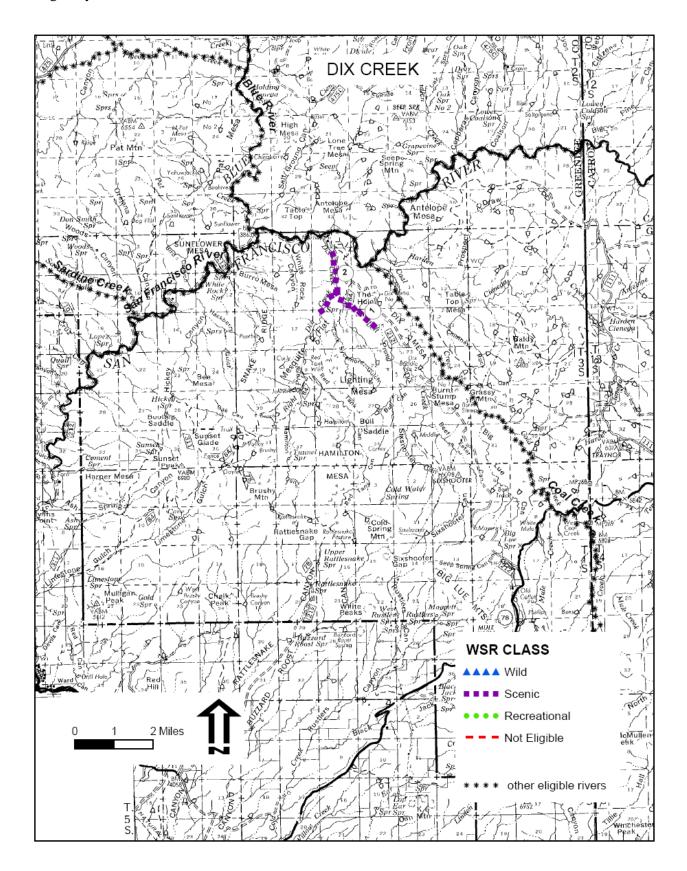
X Wild - Segments 3 and 5

X Scenic - Segment 4

X Recreational - Segments 1 and 2

Rationale: Segment 1 is eligible for Recreational river classification because there are no dams or diversions, but Forest Road 8345 parallels most of it. Segment 2 is eligible for Recreational river classification because there are no dams or diversions, but a two-track road parallels it. Segments 3 and 5 are eligible for Wild river classification because there are no dams or diversions and the only access is by foot or horseback. Segment 4 is eligible for Scenic river classification because is it crossed two large power lines.

## DIX CREEK



#### Dix Creek

## **Evaluation Form for Wild & Scenic River Eligibility Analysis**

#### SUMMARY OF ELIGIBILITY ANALYSIS SOUTHWESTERN REGION Apache-Sitgreaves National Forests

**River:** Dix Creek, Left Prong Dix Creek, Right Prong Dix Creek

**Segment 1:** Left Prong Dix Creek, from the confluence with Right Prong Dix Creek upstream for 1.5

miles, 1.5 miles

Segment 2: Right Prong Dix Creek/Dix Creek, from 0.5 miles upstream of the confluence with Left

Prong Dix Creek downstream to 0.1 miles above the diversion, 1.8 miles

Evaluated By: Clifton District

**Date:** 11/9/2007

#### **Evaluation Step**

#### Free-flowing/ORV

#### I. ELIGIBILITY ANALYSIS

#### A. Free-flowing

Yes in a natural condition without impoundment

 Existing or flowing in a natural condition without impoundment, diversion, straightening, rip rapping, or other modification of the waterway. The existence of low dams, diversion works or other minor structures does not automatically disqualify the segment for designation. A river segment below or between impoundments may also be considered.

Discussion: Both segments of Dix Creek are free-flowing and are in a natural condition.

#### B. Scenery Yes

Do the landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features or attractions? (When analyzing scenic values, additional factors-such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed-may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.)

Discussion: The area of comparison is the Clifton District.

Scenery is a value because most of Segment 1 includes a unique steep-walled canyon.

WSR Eligibility Report Eligibility Evaluations

#### **Evaluation Step**

#### C. Recreation

Free-flowing/ORV Yes

- Are recreational opportunities popular enough or have the
  potential to be popular enough to attract visitors from
  throughout or beyond the region of comparison? (River-related
  opportunities could include, but are not limited to, sightseeing,
  wildlife observations, camping, photography, hiking, fishing,
  hunting and boating. Visitors are willing to travel long distances
  to use the river resources for recreational purposes.)
- Are recreational opportunities unique or rare within the region?
- Are interpretive opportunities exceptional or have the potential to attract visitors from outside the region of comparison?
- Does the river provide or have the potential to provide settings for national or regional usage or competitive events?

Discussion: The area of comparison is the Clifton District.

Recreation is a value because Segment 1 includes a narrow, steep-walled canyon. Visitors to the canyon are presented a unique challenge in that swimming is required to traverse the length of this eligible segment.

D. Geology

 Does the river or river corridor contain one or more example of a geologic feature, process or phenomenon unique or rare within the region of comparison? (The feature(s) may be in an unusually active stage or development, represent a "textbook" example and/or represent a unique or rare combination of geologic features-erosional, volcanic, glacial or other geologic structures.)

Discussion: The area of comparison is the Clifton District. There are no unique geologic features along Dix Creek and its tributaries.

#### H. Fish

(Fish values may be judged on the relative merits of fish populations, habitat, or a combination of these conditions.)

- Is the river a nationally or regionally important producer of resident and/or anadromous fish species? (Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river provide exceptionally high quality habitat for fish species indigenous to the region of comparison? (Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District. Fish populations and habitat are values because Dix Creek and its tributaries provide critical habitat for the endangered Gila Chub. Sensitive fish species include longfin dace, Sonora sucker, and desert sucker. One other native fish species, speckled dace, is also found in Dix Creek; no non-native fish are found in this creek.

#### Free-flowing/ORV Yes

#### F. Wildlife

(Wildlife values may be judged on the relative merits of either terrestrial or aquatic populations, habitat or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous wildlife species? (Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river or river corridor provide exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species? (Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District.

Wildlife populations and habitat are values because the Dix Creek drainage contains one of three known populations of the threatened Chiricahua leopard frog. The drainage is within Recovery Unit 7, San Francisco Management Area of the Chiricahua Leopard Frog Recovery Plan. The drainage also provides habitat for neotropical migratory birds.

#### G. Heritage Resources – Historic

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting history).

 Does the river or river corridor contain a site or feature associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region? A historic site or feature, in most cases, is 50 years old or older and is eligible for the national register of historic places.

Discussion: The area of comparison is the Clifton District. There are no known historic resources along Dix Creek and its tributaries.

Free-flowing/ORV Yes

No

#### Free-flowing/ORV No

#### H. Heritage Resources – Prehistoric

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting prehistory).

• Does the river or river corridor have unique or rare characteristics or exceptional human interest value; represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare sacred purposes, and is eligible for the national register of historic places?

Discussion: The area of comparison is the Clifton District. There are no known prehistoric resources along Dix Creek and its tributaries.

#### L. Vegetation/Ecology

No

(Vegetative and ecological values may be judged on the relative merits of either populations or communities, or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous plant species? (Of importance are species considered to be unique or populations of federal or state listed or candidate threatened, endangered, or sensitive species. Diversity and number of species area also important.)
- Does the river or river corridor contain nationally or regionally important plant communities? (Communities are exceptionally high quality, unusual or critical communities such as oldgrowth.)

Discussion: The area of comparison is the Clifton District. There are no unique vegetation or ecology values along Dix Creek and its tributaries.

#### J. Other Similar Values

No

• Consider values such as (but not limited to) hydrology, paleontology, and botany. Include criteria.

Discussion: No other values were identified for Dix Creek and its tributaries.

## Evaluation Step Free-flowing/ORV

#### II. ANALYSIS OF ELIGIBILITY COMPONENTS

If Item I.A. and one or more other items above are checked "YES": River Area is eligible for designation.

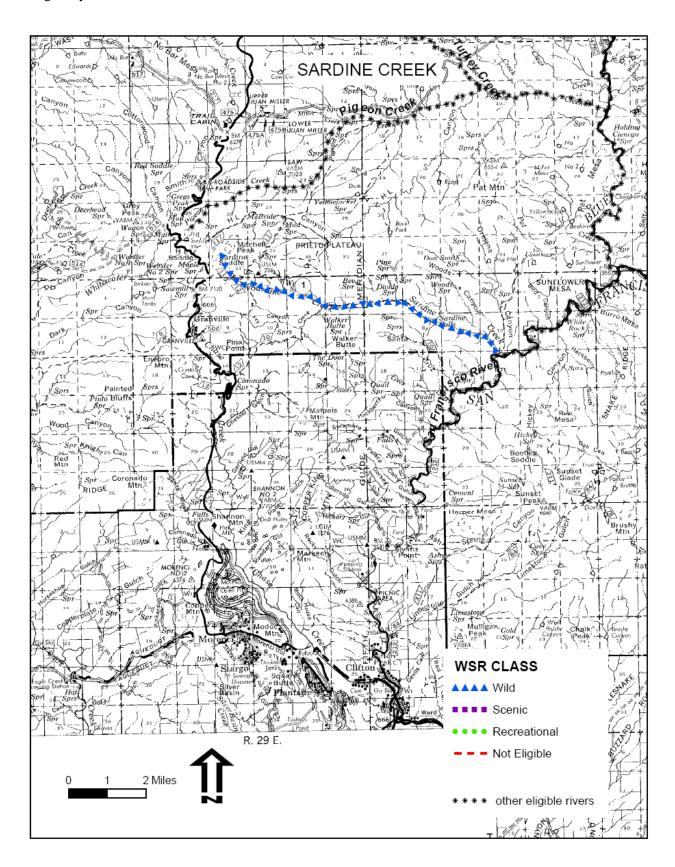
Conclusion: Dix Creek and its tributaries are eligible for designation as a Wild and Scenic River.

#### III. CLASSIFICATION

If river is eligible, what is the classification? Refer to Table 2 in the 1982 Wild and Scenic River Interagency Guidelines for the criteria used to determine classification.
☐ Wild
X Scenic - Segments 1 and 2
☐ Recreational

Rationale: Segments 1 and 2 are eligible for Scenic river classification because they are accessible in places by road and are largely primitive and undeveloped, but there is some evidence of human activity.

# SARDINE CREEK



#### Sardine Creek

Is the River free flowing?

Yes or No

Yes

Area of Comparison Statewide

Potential Outstandingly Scenery

Remarkable Value

**Eliqible Segment** 

One segment, from the headwaters to the San Francisco River.

Classification and Length Wild, 8.9 miles

**Changes from previous** 

documents

Classification changed from Scenic to Wild because "the existence of a few inconspicuous structures, particularly those of historic or cultural

value, at the time of study need not bar Wild classification."

**Location** Sardine Creek starts near U.S. Highway 191 at Sardine Saddle and

Mitchell Peak. The creek flows down Sardine Canyon and over Sardine

Falls to join the San Francisco River.

District Clifton

County Greenlee

Legal Description Township/Range: T02S, R29E; T03S, R29E; T03S, R30E; Gila and

Salt River Meridian

#### **River-related Resources**

Scenery is an Outstandingly Remarkable Value (ORV) because of the

contrasts presented by the lush riparian corridor in interior chaparral, Madrean pine-oak woodland, ponderosa pine forest, and semi-desert grassland environments. These differences are enhanced during the fall when the riparian vegetation turns from green to red, orange, and yellow.

Sardine Falls is a very dramatic feature of Sardine Canyon. The falls drop a total of 20 feet, with the water cascading down several bedrock layers. The vegetation variety provides contrasts of form, line, texture, and seasonal colors. Although Sardine Creek is a narrow drainage, there are expansive

vistas of the canyon walls.

**Recreation** Primary recreation opportunities include hunting, horseback riding, and

hiking. Overall recreation use is low.

WSR Eligibility Report Eligibility Evaluations

Geology

The westernmost portion of the river segment includes Precambrian schist. Most of the western two-thirds of the river segment includes irregularly-shaped lava flows. These rocks are dark-colored, fine-grained vesicular basalt and andesite with layered sediments and tuff. The older volcanic rocks, basalt and andesite, are extensively eroded. The rock layers may be inclined at varying angles due to block faulting and tilting. Locally, the lava rock surfaces may be decomposed into a sticky, plastic clay. The eastern third of the river segment includes Tertiary and Cretaceous-age acid volcanic rocks. These irregularly-shaped flows consist of light-colored andesites that locally include layers of tuff and agglomerate. These are intensely eroded, faulted, and broken.

Fish

Sensitive fish species include longfin dace.

Below the falls, longfin dace and speckled dace can be found in the reaches with perennial water. No fish have been found above the falls.

Wildlife

Threatened wildlife species that may occur in the Sardine Creek drainage and adjacent areas include Mexican spotted owl. Candidate wildlife species include western yellow-billed cuckoo. Sensitive wildlife species include Arizona toad, lowland leopard frog, spotted bat, zone-tailed hawk, and Arizona Bell's vireo.

Sardine Creek provides habitat for white-tailed deer, javelina, mule deer, bighorn sheep, Sanborn's long-nosed bat, California leaf-nosed bat, occult little brown bat, turkey, Montezuma quail, Gambel's quail, Swainson's hawk, ferruginous hawk, coyote, black bear, and mountain lion.

Historic

In the late 1800s and early 1900s, mining activities dominated the landscape. Scattered mine tailings, abandoned mine shafts and tunnels, trails, and occasionally the remains of old cabins and rock adobe structures are probable. One such site has been recorded near Sardine Falls. Evidence of early ranching activities is also present.

**Prehistoric** 

This river segment lies within territory occupied by the prehistoric Mogollon culture. However, little formal inventory has been conducted. The importance of a perennial water source in an otherwise arid landscape argues well that Sardine Creek was important prehistorically. It is highly probable that future inventories will record cultural resources.

Hydrology

The only area which is perennial is Sardine Falls and the adjacent downstream reach. The rest of the creek is ephemeral. Length of flow within the ephemeral reaches ranges from 3 to 5 months, depending on winter moisture and summer rains.

WSR Eligibility Report Eligibility Evaluations

Vegetation

The upland areas around Sardine Creek contain Madrean pine-oak woodland along with some ponderosa pine and interior chaparral in higher elevations. The lower country is semi-desert grassland with curly mesquite, sideoats grama, blue grama, and threeawn grasses. The lower elevations also support mesquite, catclaw acacia, yucca, prickly pear, cholla, and agave.

Along the upper reaches of Sardine Creek, vegetation is dominated by alder, with boxelder, cottonwood, Arizona sycamore, and Arizona walnut included in the overstory. Arizona grape, squawbush, and scarlet sumac are the primary shrub species. Riparian vegetation above the falls is dominated by cottonwood and netleaf hackberry. Terrace overstory consists of Arizona sycamore, alder, mesquite, and juniper. Below the falls, riparian vegetation is dominated by Arizona sycamore, alder, seepwillow, cottonwood, Goodding's willow, burrobush, and desert broom. Terrace vegetation consists of netleaf hackberry, mesquite, and desert broom.

**Land Ownership** 

There is one piece of private land (138 acres) that includes approximately 1.1 miles of the river segment. The remainder of the river segment, 7.8 miles, is national forest.

**Transportation** 

HL Canyon Trail #11 from Sardine Saddle and Frye Trail #12 cross the western portion of the river segment. Woods Trail #573 crosses Sardine Creek below Sardine Falls, while Falls Trail #304 follows the creek west for 0.8 miles from Woods Trail. Sardine Trail #10 may join up with Falls Trail.

**Livestock Grazing** 

There are three grazing allotments in Sardine Creek Canyon - Granville, Sardine, and Hickey. Grazing does not currently occur along the lower two-thirds of the river segment (Sardine and Hickey Allotments). The creek is crossed by allotment fencing.

**Past Activities** 

Historic mining activities.

**Special Land Uses** 

None.

Special Management Designation

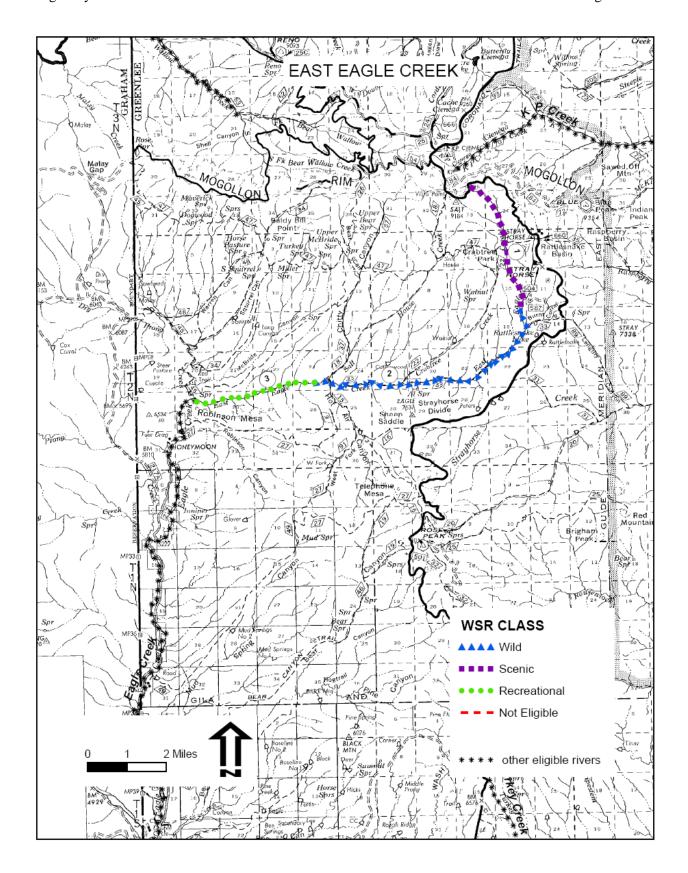
Sardine Creek is within Mitchell Peak Inventoried Roadless Area.

Other

Local users are from Safford, Duncan, Clifton, and Morenci, Arizona, and Glenwood and Reserve, New Mexico. Regional users are from Tucson, Phoenix, and Albuquerque.

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# EAST EAGLE CREEK



#### East Eagle Creek

## **Evaluation Form for Wild & Scenic River Eligibility Analysis**

#### SUMMARY OF ELIGIBILITY ANALYSIS SOUTHWESTERN REGION Apache-Sitgreaves National Forests

**River:** East Eagle Creek

Segment 1: Headwaters to ¼ mile below Forest Road 587, 3.5 miles Segment 2: ¼ mile below Forest Road 587 to Sawmill Cabin, 7.5 miles Segment 3: Sawmill Cabin to confluence with Eagle Creek, 3.5 miles

Evaluated By: Clifton District

**Date:** 11/9/2007

## Evaluation Step Free-flowing/ORV

#### I. ELIGIBILITY ANALYSIS

#### A. Free-flowing

Yes

• Existing or flowing in a natural condition without impoundment, diversion, straightening, rip rapping, or other modification of the waterway. The existence of low dams, diversion works or other minor structures does not automatically disqualify the segment for designation. A river segment below or between impoundments may also be considered.

Discussion: All segments of East Eagle Creek are free-flowing and are in a natural condition.

#### B. Scenery

No

Do the landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features or attractions? (When analyzing scenic values, additional factors-such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed-may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.)

Discussion: The area of comparison is the Clifton District. There are no unique scenery values along East Eagle Creek.

#### C. Recreation

Free-flowing/ORV Yes

- Are recreational opportunities popular enough or have the
  potential to be popular enough to attract visitors from
  throughout or beyond the region of comparison? (River-related
  opportunities could include, but are not limited to, sightseeing,
  wildlife observations, camping, photography, hiking, fishing,
  hunting and boating. Visitors are willing to travel long distances
  to use the river resources for recreational purposes.)
- Are recreational opportunities unique or rare within the region?
- Are interpretive opportunities exceptional or have the potential to attract visitors from outside the region of comparison?
- Does the river provide or have the potential to provide settings for national or regional usage or competitive events?

Discussion: The area of comparison is the Clifton District.

Recreation is a value because the diverse opportunities, especially for big game hunting, attract visitors from beyond the area of comparison. This value is enhanced by the exceptional trail access.

D. Geology

 Does the river or river corridor contain one or more example of a geologic feature, process or phenomenon unique or rare within the region of comparison? (The feature(s) may be in an unusually active stage or development, represent a "textbook" example and/or represent a unique or rare combination of geologic features-erosional, volcanic, glacial or other geologic structures.)

Discussion: The area of comparison is the Clifton District. There are no unique geologic features along East Eagle Creek.

#### I. Fish

(Fish values may be judged on the relative merits of fish populations, habitat, or a combination of these conditions.)

- Is the river a nationally or regionally important producer of resident and/or anadromous fish species? (Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river provide exceptionally high quality habitat for fish species indigenous to the region of comparison? (Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District. Fish species and habitat are values because East Eagle Creek provides high quality habitat for the endangered Gila chub and other native and non-native fish species.

F. Wildlife

(Wildlife values may be judged on the relative merits of either terrestrial or aquatic populations, habitat or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous wildlife species? (Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")
- Does the river or river corridor provide exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species? (Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable.")

Discussion: The area of comparison is the Clifton District. There are no unique wildlife values along East Eagle Creek.

East Eagle Creek is a neotropical bird migratory corridor and provides water, cover, and forage for a variety of game and non-game wildlife species.

Free-flowing/ORV Yes

#### Free-flowing/ORV No

#### G. Heritage Resources – Historic

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting history).

 Does the river or river corridor contain a site or feature associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region? A historic site or feature, in most cases, is 50 years old or older and is eligible for the national register of historic places.

Discussion: The area of comparison is the Clifton District.

Historical resources include old logging in the headwaters and Sawmill cabin, but these are not outstanding.

#### H. Heritage Resources – Prehistoric

No

(The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting prehistory).

• Does the river or river corridor have unique or rare characteristics or exceptional human interest value; represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare sacred purposes, and is eligible for the national register of historic places?

Discussion: The area of comparison is the Clifton District. There are no known prehistoric resources along East Eagle Creek.

#### Free-flowing/ORV No

#### M. Vegetation/Ecology

(Vegetative and ecological values may be judged on the relative merits of either populations or communities, or a combination of these conditions.)

- Does the river or river corridor contain nationally or regionally important populations of indigenous plant species? (Of importance are species considered to be unique or populations of federal or state listed or candidate threatened, endangered, or sensitive species. Diversity and number of species area also important.)
- Does the river or river corridor contain nationally or regionally important plant communities? (Communities are exceptionally high quality, unusual or critical communities such as oldgrowth.)

Discussion: The area of comparison is the Clifton District. There are no known vegetation or ecology values along East Eagle Creek.

#### J. Other Similar Values

No

 Consider values such as (but not limited to) hydrology, paleontology, and botany. Include criteria.

Discussion: No other values were identified for East Eagle Creek.

#### II. ANALYSIS OF ELIGIBILITY COMPONENTS

If Item I.A. and one or more other items above are checked "YES": River Area is eligible for designation.

Conclusion: East Eagle Creek is eligible for designation as a Wild and Scenic River.

#### Free-flowing/ORV

#### III. CLASSIFICATION

If river is eligible, what is the classification? Refer to Table 2 in the 1982 Wild and Scenic River Interagency Guidelines for the criteria used to determine classification.

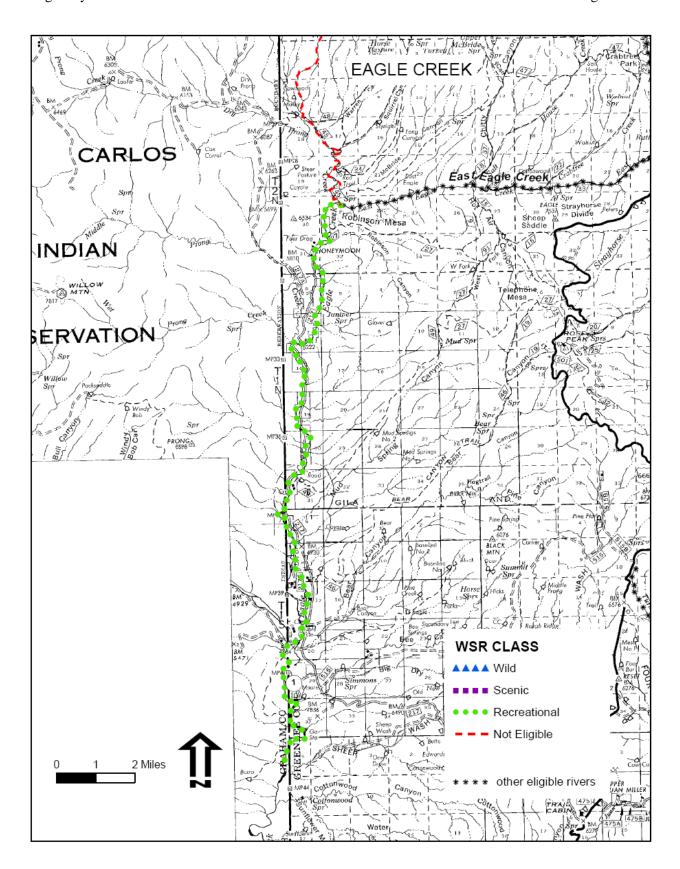
X Wild - Segment 2

X Scenic - Segment 1

X Recreational - Segment 3

Rationale: Segment 1 is eligible for Scenic river classification because there are no dams or diversions, but Forest Road 587 crosses it. Segment 2 is eligible for Wild river classification because there are no dams or diversions, there is no development along the creek, and the only access is by foot or horseback. Segment 3 is eligible for Recreational river classification because there are no dams or diversions, but a motorized vehicle trail parallels it.

# EAGLE CREEK



#### Eagle Creek

Is the River free flowing?

Yes or No

Yes

Area of Comparison Statewide

Potential Outstandingly Remarkable Values

Fish, Wildlife, Vegetation

Eligible Segment One segment, from East Eagle Creek, south along Eagle Creek to the

confluence with Sheep Wash.

Classification and Length Recreational, 19.5 miles

Changes from previous

documents

From the headwaters (Dogwood Spring) south to Dry Prong Creek and south along Dry Prong Creek to East Eagle Creek is not eligible because

there are no associated Outstandingly Remarkable Values (ORV).

**Location** Eagle Creek starts high on the Mogollon Rim from a combination of

many springs and streams and flows south for over 55 miles until it joins

the Gila River.

District Clifton

County Greenlee

Legal Description Township/Range: T01S, R28E & T02S, R28E; Gila and Salt River

Meridian. T01N, R28E & T02N, R28E; Gila and Salt River Meridian

#### **River-related Resources**

**Scenery** Eagle Creek is characterized by riparian areas and grasslands. The varying

vegetation types create many different colors and textures during the

seasons.

**Recreation** The river segment offers excellent opportunities for birding enthusiasts,

with high potential for birding eco-tours. The main recreation activities include hunting, horseback riding, fishing, hiking, camping, and wildlife viewing. Honeymoon Campground provides developed sites. The area receives moderate recreation use south of Honeymoon Campground and

low use to the north.

**Geology** Geology of the northern river segment consists of irregularly-shaped lava

flows. These rocks are dark-colored, fine-grained, vesicular basalt and andesite with interbedded sediments and tuff. The older volcanic rocks, basalt and andesite, are extensively eroded. The rock layers maybe inclined at varying angles due to block faulting and tilting. Locally, the lava rock surfaces may be decomposed into a sticky, plastic clay. Geology of the southern part of the river segment has semi-consolidated sediments that were deposited by a river into a closed basin and are now exposed because of stream down-cutting and erosion. These rocks are tentatively assigned to

the Gila Formation.

WSR Eligibility Report **Eligibility Evaluations** 

Fish

Fish species and habitat are ORVs because of the diversity of species and the high quality habitat for those species.

Endangered fish species include Gila chub. Threatened fish species include spikedace and loach minnow. Eagle Creek is designated critical habitat for Gila chub and proposed critical habitat for spikedace. Lower Eagle Creek is proposed critical habitat for razorback sucker. Sensitive fish species include roundtail chub, longfin dace, Sonora sucker, and desert sucker.

Wildlife

Wildlife species and habitat are ORVs because of the diversity of listed species and the high quality habitat for those species.

Threatened wildlife species include Chiricahua leopard frog. Candidate wildlife species include Mexican gartersnake. Sensitive wildlife species include bald eagle, common black-hawk, Springerville silky pocket mouse, narrow-headed gartersnake, Arizona toad, northern leopard frog, lowland leopard frog, spotted bat, zone-tailed hawk, and Arizona Bell's vireo. Eagle Creek is within the Mexican gray wolf primary recovery zone. Potential habitat for the endangered southwest willow flycatcher and the candidate western vellow-billed cuckoo exists along Eagle Creek.

Eagle Creek is an important migration corridor for neotropical birds.

Lands around the stream segment provide habitat for numerous game species including black bear, mule deer, and Rocky Mountain elk. Other wildlife species include pronghorn antelope, occult little brown bat, turkey, javelina, white-tailed deer, Montezuma quail, dove, coyote, and mountain lion. Great blue herons have also been seen in this area.

**Historic** 

In the late 1800s many ranches and homesteads were established along Eagle Creek. Some of these ranches are still operating today. The many private parcels of land along the creek today testify to the number of homestead that were patented. The Forest Service was also part of the area's history; the Honeymoon Ranger Station was constructed in 1907 and the Eagle Creek Ranger Station several years later. Both have since been decommissioned and demolished.

**Prehistoric** 

Eagle Creek contains all the elements needed for humans to survive and thrive. The perennial creek is situated in a broad, fertile plaint that is ideal for agriculture and human habitation. The river corridor contains scores of recorded prehistoric sites and many more sites that have not been discovered. The sites range from simple Archaic period lithic scatters to 15<sup>th</sup> century aggregate pueblos.

Hydrology

Water flow on Eagle Creek is primarily perennial between the Double Circle Ranch and Sheep Wash. The nearly year-round water is important to the riparian habitats along the creek and to wildlife. However, during dry periods, flow becomes intermittent. The Phelps Dodge Corporation has a number of large wells on privately owned and Forest Service-administered lands between the Double Circle Ranch and Sheep Wash. These wells pump water into Eagle Creek when natural flows fail to supply the operational needs of the downstream Morenci Mine. Pipeline and discharge facilities lie on rights-of-way under Forest Service permits within the land corridor.

#### WSR Eligibility Report Eligibility Evaluations

**Vegetation** Vegetation is an ORV because of outstanding quality of the riparian

vegetation.

Sensitive plant species include Blumer's dock and Wislizeni gentian.

Overstory vegetation along Eagle Creek is primarily narrowleaf cottonwood, Arizona walnut, and boxelder. Shrubs consist primarily of scarlet sumac. Grasslands surround the identified river segment and are characterized by bunchgrasses, chaparral, piñon pine, and alligator juniper.

**Land Ownership** Land ownership includes approximately 8.4 river miles of national forest,

2.6 river miles of San Carlos Indian Reservation, and 8.5 river miles of

private.

**Transportation** The Eagle Creek Road is the main access and parallels Eagle Creek from

the Double Circle Ranch to Honeymoon Campground. Five other roads cross Eagle Creek, providing access to the creek and private lands. Squirrel

Canyon Trail #34 parallels the river segment from Honeymoon

Campground north to East Eagle Creek. Other nearby trails include Coyote #704, East Eagle #33, Robinson Mesa #27, and Eagle National Recreation

Trail #79.

**Livestock Grazing** Four grazing allotments overlay Eagle Creek. They include East Eagle,

Mud Springs, Baseline-Horse Springs, and Double Circle Allotments. There are numerous fences, corrals, cattleguards, and other range

developments along the river segment.

Past Activities None.

**Special Land Uses** There is one developed campground, Honeymoon, along the river segment.

There are special use authorizations for a water transmission ditch, two irrigation ditches, a water transmission pipeline, and a school. The Upper Eagle Creek Watershed Association is an active partner in management of

the entire watershed.

Special Management

Designations

The river segment is adjacent to Hot Air Inventoried Roadless Area (IRA)

and is within or adjacent to Salt House IRA.

Other Local users are from Safford, Duncan, Clifton, and Morenci, Arizona, and

Glenwood and Reserve, New Mexico. Regional users are from Tucson and Phoenix. The Eagle Creek area is known nationally because it has been

highlighted in regional publications.

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## **Appendices**

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## **Appendix A - Regional Forester Memo**

File Code: 2350/1920/1570 Date: March 8, 2005

**Route To:** 

Subject: Center for Biological Diversity v. Veneman (Arizona Rivers)

**To:** Forest Supervisor, Apache-Sitgreaves National Forests, Forest Supervisor, Coconino National Forest, Forest Supervisor, Coronado National Forest, Forest Supervisor, Kaibab National Forest, Forest Supervisor, Prescott National Forest,

Forest Supervisor, Tonto National Forest

In 2001 the Center for Biological Diversity ("Center") brought suit against the government, claiming that the Forest Service had violated the Wild and Scenic Rivers Act by failing to consider and provide protection for 57 rivers in Arizona. This case was heard by the District Court in Arizona (which ruled in our favor), appealed to the Ninth Circuit Court of Appeals (which initially ruled in favor of the plaintiffs), and then reheard by the Ninth Circuit.

On January 7, 2005, the Ninth Circuit Court of Appeals issued an amended opinion in the above referenced case. A copy of the opinion is attached. The Ninth Circuit Court affirmed the district court's dismissal of the Center's suit for lack of standing. However, the court reversed the district court's opinion that the plaintiffs could not amend their complaint, concluding that the plaintiffs may be able to assert a claim against the Forest Service for failure to act.

In its opinion, the Court concluded that the Forest Service's 1993 Resource Information Report prepared for the Arizona Congressional Delegation constitutes eligibility for the 57 rivers contained in that report. Forest Service policy at FSH 1909.12, Chapter 8.12 states that management prescriptions for eligible rivers should provide the following protection:

- 1. ...free flowing characteristics cannot be modified.
- 2. Outstandingly remarkable values (ORVs) must be protected, and to the extent practicable, enhanced.
- 3. Management and development of the river and its corridor cannot be modified to the degree that eligibility or classification would be affected.

Projects with the potential to affect the free flowing character, ORVs, or classification of the 57 eligible rivers must be assessed specific to impacts to river eligibility and classification. If a project may affect eligibility or classification of any of these rivers, then the project should be discontinued, modified to eliminate these effects, or river suitability should be determined.

During the Forest Plan revision process, each forest, at a minimum, must identify how these rivers will be protected until a decision is made as to the future use of the river and adjacent lands (suitability). It is recommended that each forest update your eligibility determinations for all rivers during Forest Plan revision, because the determinations regarding eligible rivers done in 1993 may no longer be an accurate measure of what rivers are eligible. It may also be useful to proceed with suitability during Forest Plan revision, but that may be completed in a separate process.

People on your forest who are dealing with issues involving eligible rivers may be interested in upcoming training that will explain the study process, which includes both eligibility and suitability. Jackie

Diedrich, national Wild and Scenic Rivers Coordinator, will be providing this training in Phoenix April 19-21. If you are interested in attending, or if you have any questions about this letter, please contact Deidre St. Louis at (505) 842-3234 (dstlouis@fs.fed.us).

/s/ Leonard Lucero (for) HARV FORSGREN Regional Forester

cc: Patrick L Jackson, Jackie Diedrich, MARYANN.JOCA, Bob Davis

Enclosure

## **Appendix B - Forest Service Handbook guidance**

#### FSH 1909.12 - LAND MANAGEMENT PLANNING HANDBOOK

**CHAPTER 80 – WILD AND SCENIC RIVER EVALUATION** 

# 81 – IDENTIFICATION OF RIVERS FOR WILD AND SCENIC RIVER STUDY

### 81.1 – Identification of Study Rivers

Rivers are identified for study for potential inclusion in the National Wild and Scenic Rivers System (National System) by one of two means:

- 1. Identification by Congress under section 5(a) of the Wild and Scenic Rivers Act of October 2, 1968 (act) directing a federal agency to study a river.
- 2. Identification for study by the Secretary of Agriculture or the Secretary of the Interior under section 5(d)(1) of the act.

## 81.1 – Identification of Study Rivers

The land management planning process shall include a comprehensive evaluation of the potential for rivers in an administrative unit to be eligible for inclusion in the National System. Sources for identifying the significance of river-related values include the Nationwide Rivers Inventory; state river assessments; identification by Tribal governments, other federal, state, or local agencies; and the public.

If a systematic inventory of eligible rivers or a comprehensive forest, grassland, prairie, or other comparable administrative unit-wide suitability study has been previously completed and documented, additional assessment and study at time of land management plan revision need only be done if changed circumstances warrant additional review of eligibility or if the Responsible Official decides to evaluate suitability for one or more eligible rivers in the planning process. Otherwise, the process need not be revisited in land management planning. Document this in the revised land management plan.

### 83.1 - Wild and Scenic River Study in Land Management Plans

When river study is accomplished in the land management planning process, address all potential wild and scenic rivers flowing wholly or partially on NFS lands as identified in the Nationwide Rivers Inventory and by other sources (sec. 81.1). Unless a systematic inventory of eligible rivers has been completed (sec. 81.2), the land management planning team should develop and conduct a process to determine which rivers meet the eligibility criteria specified in sections 1(b) and 2(b) of the act. Document the finding of ineligibility (sec. 82.2) or eligibility and the river's potential classification in the land management plan EIS under 1982 planning rule (47 FR 43026, as amended) (1982 planning rule) or plan set of documents under the 2008 planning rule (70 FR 1023) (2008 planning rule).

The timing of conducting the suitability process may vary. The preferred process is to proceed with determining suitability in the land management planning process. An alternative is to delay the suitability determination of eligible rivers until a subsequent separate study is completed. If such delay is warranted, the land management plan shall provide for protection of the eligible river corridor until a decision is made on the future use of the river and adjacent lands.

Legislatively mandated studies may be included in the land management plan only when plan revision and the specified river study period are compatible. The study must meet the specific statutory requirements (sec. 84.2) and make a determination of the river's suitability or nonsuitability for designation. See FSH 1909.15 to determine the applicable NEPA documentation.

# **Appendix C - Summary Form for Wild and Scenic River Eligibility Status**

## Rivers Eligible for Wild and Scenic River Status

## Apache-Sitgreaves National Forests January 2009

River Name	Segment Number	Segment Milepost From	Segment Milepost To	ORV(s)	Classification	Comments
Willow Creek	1	18.9 miles		Scenery Geology Wildlife Vegetation	Wild	
***		l		T ~		T
Woods Canyon/ Chevelon Creek	1	4.9 miles		Scenery Wildlife Vegetation	Wild	
Woods Canyon/ Chevelon Creek	2	12.8 miles		Scenery Fish Wildlife Vegetation	Wild	
Woods Canyon/ Chevelon Creek	3	5.3 miles		Scenery Fish Vegetation	Scenic	
Woods Canyon/ Chevelon Creek	4	2.4 miles		Scenery Fish Vegetation	Recreational	small in-stream diversion
Woods Canyon/ Chevelon Creek	5	10.7 miles		Scenery Fish Vegetation	Wild	
West Fork Little Colorado River	1	4.3 miles		Scenery Recreation	Wild	
West Fork Little Colorado River	2	1.7 miles		Scenery Recreation	Recreational	
West Fork Little Colorado River	3	2.1 miles		Scenery Recreation Wildlife	Wild	
East Fork Little Colorado River	1	9.3 miles		Scenery Recreation Fish Wildlife Vegetation	Scenic	

River Name	Segment Number	Segment Milepost From	Segment Milepost To	ORV(s)	Classification	Comments
South Fork Little Colorado River	1	5.9 miles		Scenery	Scenic	
South Fork Little Colorado River	2	1.4 miles		Scenery	Scenic	
Bear Wallow Creek	1	3.7 miles		Scenery Recreation Fish Wildlife	Wild	
Bear Wallow Creek	2	0.9 miles		Scenery Recreation Fish Wildlife	Recreational	fish barrier
Black River	1	11 miles		Scenery Recreation Fish Wildlife	Wild	
Black River	2	0.5 miles		Scenery Recreation Fish Wildlife	Scenic	
Black River	3	7.3 miles		Scenery Recreation Fish Wildlife	Wild	
West Fork Black River	1	3.0 miles		Scenery Recreation Fish	Scenic	
West Fork Black River	2	8.6 miles		Scenery Recreation Fish Wildlife	Wild	
East Fork Black River	1	1.2 miles		Scenery Recreation Fish Wildlife	Scenic	
East Fork Black River	2	3.3 miles		Scenery Recreation Fish Wildlife	Wild	
East Fork Black River	3	8.2 miles		Scenery Recreation Fish Wildlife Historic	Recreational	

River Name	Segment Number	Segment Milepost From	Segment Milepost To	ORV(s)	Classification	Comments
North Fork East Fork Black River	1	4.9 miles		Scenery Fish Wildlife	Wild	
North Fork East Fork Black River	2	1 mile		Scenery Fish Wildlife	Scenic	
North Fork East Fork Black River	3	7.8 miles		Scenery Fish Wildlife	Wild	
Fish Creek	1	9.9 miles		Scenery Recreation Fish Wildlife	Scenic	
Fish Creek	2	0.6 miles		Scenery Recreation Fish Wildlife	Recreational	fish barrier
Campbell Blue Creek	1	1.1 miles		Scenery Recreation Fish Wildlife Vegetation Ecology	Recreational	
Campbell Blue Creek	2	4.1 miles		Scenery Recreation Fish Wildlife Vegetation Ecology	Wild	
Campbell Blue Creek	3	6.9 miles		Scenery Recreation Fish Wildlife Vegetation Ecology	Recreational	
Blue River	1	25.1 miles		Scenery Recreation Fish Wildlife Historic Cultural Vegetation	Recreational	
Blue River	2	16.0 miles		Scenery Recreation Fish Wildlife Historic Cultural Vegetation	Wild	

River Name	Segment Number	Segment Milepost From	Segment Milepost To	ORV(s)	Classification	Comments
Blue River	3	4.2 miles		Scenery Recreation Fish Wildlife Historic Cultural Vegetation	Scenic	
Blue River	4	8.1 miles		Scenery Recreation Fish Wildlife Historic Cultural Vegetation	Wild	
KP Creek	1	11.3 miles		Scenery Recreation Fish Wildlife	Wild	
Little Blue Creek	1	18.4 miles		Scenery Recreation	Wild	
Turkey Creek	1	8.2 miles		Wildlife	Wild	
Turkey Creek	2	1 mile		Prehistoric Wildlife Recreation	Wild	
Pigeon Creek	1	10.3 miles		Cultural	Recreational	
Pigeon Creek	2	4.8 miles		Cultural	Wild	
<i>-</i>						
San Francisco River	1	9.0 miles		Scenery Recreation Fish Wildlife Vegetation	Wild	
San Francisco River	2	15.0 miles		Recreation Fish Wildlife	Recreational	
Coal Creek	1	6.9 miles		Recreation	Recreational	
				Historic		
Coal Creek	2	0.8 miles		Recreation Fish Wildlife	Recreational	
Coal Creek	3	4.2 miles		Recreation Fish Wildlife	Wild	
Coal Creek	4	0.6 miles		Recreation Fish Wildlife	Scenic	

River Name	Segment Number	Segment Milepost From	Segment Milepost To	ORV(s)	Classification	Comments
Coal Creek	5	5.4 miles		Recreation Fish Wildlife	Wild	
Dix Creek	1	1.5 miles		Scenery Recreation Fish Wildlife	Scenic	Left Prong
Dix Creek	2	1.8 miles		Fish Wildlife	Scenic	Dix + Right Prong
	ı		T			1
Sardine Creek	1	8.9 miles		Scenery	Wild	
East Eagle Creek	1	3.5 miles		Recreation Fish	Scenic	
East Eagle Creek	2	7.5 miles		Recreation Fish	Wild	
East Eagle Creek	3	3.5 miles		Recreation Fish	Recreational	
Eagle Creek	1	19.5 miles		Fish Wildlife Vegetation	Recreational	

(All rivers listed above are free-flowing and have at least one ORV. Therefore, all rivers listed above are eligible for wild and scenic river status.)

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## Appendix D - Wild and Scenic River Inventory Documentation

Identification of Rivers on the Apache-Sitgreaves National Forests with Potentially Outstandingly Remarkable Values (ORVs)

Possible ORVs: a - Scenery

a - Scenery f - Heritage - Historic
b - Recreation g - Heritage - Prehistoric
c - Geology h - Vegetation/Ecology
d - Fish i - Other Values

e - Wildlife

D ' /D'	T 41			P	ossi	ble (	ORV	NI-4			
Basin/River	Length	a	b	c	d	e	f	g	h	i	Notes
Little Colorado River Basin											
Chevelon Canyon	34.4	X		X	X	X			X		
Willow Springs Canyon	6.2										no ORVs
Woods Canyon	11.2	X				X			X		
Willow Creek	32.2	X		X		X			X		
West Chevelon Creek	31.4										no ORVs
Alder Canyon	19										no ORVs
Sand Draw	8.3										not free-flowing
Bear Canyon	6.5										not free-flowing
Gentry Canyon	8.6										no ORVs
Wilkins Canyon	14.6										no ORVs
Leonard Canyon**	23.6				X						
Upper Leonard Canyon**	25.8										no ORVs
Beaver Canyon	6										no ORVs
Town Draw	14.4										no ORVs
Day Wash	21.5										no ORVs
Cottonwood Wash	29.4										no ORVs
Decker Wash	21.4										no ORVs
Phoenix Park Wash	20.2										no ORVs
Pierce Wash	22.1										no ORVs
Black Canyon	28.8										no ORVs
Potato Wash	6.3										no ORVs
Wildcat Canyon	34.1										no ORVs
Turkey Creek	8.5										no ORVs
East Clear Creek**	21.4	X			X						
West Fork Black Canyon	5										no ORVs
Walnut Creek	6.3										no ORVs
Billy Creek	7.8										no ORVs
Linden Draw	10.4										no ORVs
Dobson Wash	11.5										no ORVs
Town Draw	14.4										no ORVs
Show Low Creek	29										no ORVs
Brown Creek	17.2										not free-flowing
Porter Creek	3.5										no ORVs

D ' /D'	T 41			P	ossi	ble (	ORV	NT-4			
Basin/River	Length	a	b	c	d	e	f	g	h	i	Notes
West Fork Little Colorado	9.6	X	X			X					
River											
East Fork Little Colorado	10.8	X	X		X	X			X		
River											
South Fork Little Colorado	10.5	X									
River											
Hall Creek	11.5										no ORVs *
Nutrioso Creek	24.8										no ORVs
Little Colorado River	9.4										no ORVs*
(Greer to South Fork)											
Benny Creek	9.8										no ORVs *
Rosey Creek	3.2										no ORVs
Mineral Creek	7										no ORVs
Lee Valley Creek	3.1										no ORVs
Fish Creek	9.3										no ORVs
Carnero Creek	4.5										no ORVs
Benton Creek	6.2										no ORVs
Rudd Creek	10.8										no ORVs
Water Canyon	7.8										no ORVs
Auger Canyon Creek	6.7										no ORVs
Morrison Creek	2.8										not free-flowing
Milk Creek	5										no ORVs
Watts Creek	4.8										not free-flowing
Davis Creek	6.6										not free-flowing
Woods Creek	3.8										not free-flowing
Hulsey Creek	5.3										no ORVs
Paddy Creek	4.9										no ORVs
Riggs Creek	7.7										no ORVs
Colter Creek	7.7										no ORVs
Mamie Creek	5										no ORVs (ATR)
Salt River Basin											311 321 2 (222-4)
Chambers Draw	6.4										no ORVs
Burro Creek	6.7										no ORVs
West Fork Black River	17.4	X	X		X	Х	X		X		
East Fork Black River	8.4	X	X		X	X	X				
North Fork East Fork Black	20.5	X	7.		X	X	7.				
River	20.5	1			11	11					
Home Creek	9.5										not free-flowing
Black River	18.8	X	X		X	X			X		not nee nowing
Fish Creek	14.3	- 11	X		X	X			-11		
Boggy Creek	7.5		11		- 11						no ORVs (ATR)
Snake Creek	6.3										no ORVs *
Conklin Creek	7.6										no ORVs (ATR)
Double Cienega Creek	3.8										no ORVs (ATR)
Corduroy Creek	4.5										no ORVs (ATR)
Centerfire Creek	9.8										
Centernre Creek	9.8										no ORVs (ATR)

Wildeat Creek	D ' /D'	T (1			P	ossi	ble (	OR	N-4			
Bear Creek	Basin/River	Length	a	b	c	d	e	f	g	h	i	Notes
Johns Canyon	Wildcat Creek	6.2										no ORVs (ATR)
Willow Creek         7.2         No.         No. <t< td=""><td>Bear Creek</td><td>4.2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>no ORVs *</td></t<>	Bear Creek	4.2										no ORVs *
Bear Wallow Creek	Johns Canyon	6.3										not free-flowing
Thomas Creek	Willow Creek	7.2										no ORVs
Hannagan Creek	Bear Wallow Creek	7	X			X				X		
Horse Creek	Thomas Creek	4.4										no ORVs
Deer Creek	Hannagan Creek	6.9										no ORVs (ATR)
Coyote Creek	Horse Creek	7.4										no ORVs
Open Draw Creek	Deer Creek	6.2										no ORVs
Boneyard Creek	Coyote Creek	10.3										no ORVs (ATR) *
Reservation Creek	Open Draw Creek	4.1										no ORVs
Reservation Creek	Boneyard Creek	10.3										no ORVs *
Campbell Blue Creek   21.1	•	3.4										no ORVs *
Campbell Blue Creek         21.1         x         x         x         x         x           Blue River         53.5         x	Heifer Branch Beaver Crk	6.1										no ORVs
Blue River	Upper Gila River Basin										<u> </u>	
RP Creek	Campbell Blue Creek	21.1	X	X		X	X			X		
Horton Creek	Blue River	53.5	X	Х		X	X	X	X	Х		
Beaver Creek         13.8         no O           Perry Springs Creek         no O         no O           Stone Creek         7.2         no O           Bob Thomas Creek         2         no O           Little Creek         5.2         no O           Pace Creek         6.4         no O           Fishhook Creek         5.3         no O           Bush Creek         8.5         no O           Tutt Creek         5.3         no O           Centerfire Creek (above private lands)         5.9         no O           Canyon Creek         3.9         no O           Hinkle Creek         3.0         no O           Steeple Creek (near Joys)         6.3         no O           McKittrick Creek         7.3         no O           McKittrick Creek         7.8         no O           Largo Creek         4.4         no O           Raspberry Creek         8.7         no O           Lanphier Creek         7.1         no O           Grant Creek         11.4         no O           Castle Creek         6.8         no O	KP Creek	12.8	X									
Beaver Creek         13.8         no O           Perry Springs Creek         no O         no O           Stone Creek         7.2         no O           Bob Thomas Creek         2         no O           Little Creek         5.2         no O           Pace Creek         6.4         no O           Fishhook Creek         5.3         no O           Bush Creek         8.5         no O           Tut Creek         5.3         no O           Centerfire Creek (above private lands)         5.9         no O           Canyon Creek         3.9         no O           Hinkle Creek         3.0         no O           Steeple Creek (near Joys)         6.3         no O           McKittrick Creek         7.3         no O           McKittrick Creek         7.8         no O           Largo Creek         4.4         no O           Raspberry Creek         8.7         no O           Lanphier Creek         7.1         no O           Grant Creek         11.4         no O           Castle Creek         6.8         no O	Horton Creek	6.1										no ORVs
Perry Springs Creek         no Old           Stone Creek         7.2         no Old           Bob Thomas Creek         2         no Old           Little Creek         5.2         no Old           Pace Creek         6.4         no Old           Fishhook Creek         5.3         no Old           Bush Creek         8.5         no Old           Tutt Creek         5.3         no Old           Centerfire Creek (above private lands)         5.9         no Old           Canyon Creek         3.9         no Old           Hinkle Creek         3.0         no Old           Steeple Creek (near Joys)         6.3         no Old           Nolan Creek         7.3         no Old           McKittrick Creek         7.8         no Old           Largo Creek         4.4         no Old           Raspberry Creek         8.7         no Old           Lanphier Creek         7.1         no Old           Foote Creek         11.4         no Old           Grant Creek         6.8         no Old	Beaver Creek	13.8										no ORVs
Stone Creek         7.2         no Old           Bob Thomas Creek         2         no Old           Little Creek         5.2         no Old           Pace Creek         6.4         no Old           Fishhook Creek         5.3         no Old           Bush Creek         8.5         no Old           Tutt Creek         5.3         no Old           Centerfire Creek (above private lands)         5.9         no Old           Canyon Creek         3.9         no Old           Hinkle Creek         3.0         no Old           Steeple Creek (near Joys)         6.3         no Old           Nolan Creek         7.3         no Old           McKittrick Creek         7.8         no Old           Largo Creek         4.4         no Old           Raspberry Creek         8.7         no Old           Lanphier Creek         7.1         no Old           Foote Creek         11.4         no Old           Grant Creek         6.8         no Old	Perry Springs Creek											no ORVs
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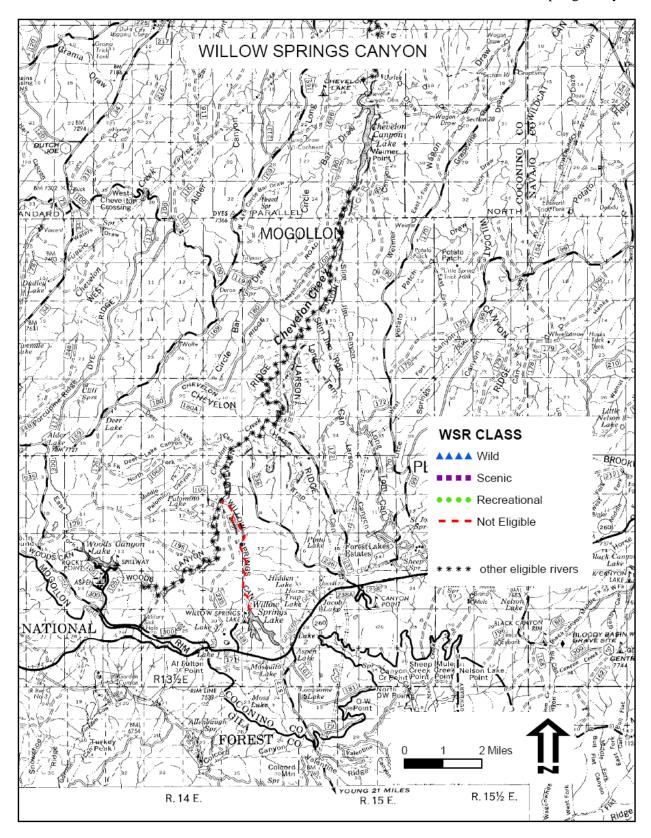
Dogin/Direct	Lonoth			P	ossi	ble (	ORV	NT 4			
Basin/River	Length	a	b	c	d	e	f	g	h	i	Notes
Eagle Creek	20.6				X	X			X		
Chitty Creek	5.4										no ORVs, scoured in 2007
Pigeon Creek	14.9							X			
Sardine Creek	9	X									
San Francisco River	24.1	X	X		X	X			X		
Turkey Creek	9.5	X	X			X		X			
Dry Prong Creek	13.7										no ORVs
Sheep Wash	16.4										no ORVs
East Eagle Creek	14.5		X		X						
Rousensock & Thomas	18.9										no ORVs
Creek											
Horse Canyon Creek	4.6										no ORVs
Strayhorse Creek	11.6										no ORVs
Little Blue Creek	18.4	X	X								
Clear Creek	12										no ORVs
Harden Cienega Creek	14.6										no ORVs
Dix Creek	1.7				X	X					
Left Prong Dix Creek	6.7		X		X	X					
Right Prong Dix Creek	4.4				X	X					
Limestone Gulch	6.5										no ORVs
Coal Creek	19.1		X		X	X	X				
Hannah Springs Creek	7.9										no ORVs

<sup>\*</sup> The district stated an intention to look further at the river, but no additional information was received.

<sup>\*\*</sup> Leonard Canyon and East Clear Creek evaluated by Coconino NF

ATR - Apache Trout Restoration water

# **Appendix E - Ineligible Rivers**



## Willow Springs Canyon

Is the River free flowing?

Yes or No

Yes

**Potential Outstandingly** 

**Remarkable Values** 

No Outstandingly Remarkable Values (ORV), no longer eligible

**Area of Comparison** Sitgreaves NF

**Eligible Segment** None Classification and Length None

Changes from previous

documents

When compared to other rivers in the area of comparison, the interdisciplinary team felt that the scenery was not unique and,

therefore, was not an outstandingly remarkable value. Scenery was the

only identified ORV.

Location From below Willow Springs Lake Dam to the confluence with Chevelon

Creek.

**District** Black Mesa County Coconino

**Legal Description** Township/Range: T11N, R14E, Gila and Salt River Meridian

#### **River-related Resources**

The canyon is a narrow "V" drainage with mixed conifer and is similar to Scenery

other canyons in the area of comparison.

Recreation Although no trails exist along the river, hiking, hunting, sightseeing, and

> some limited fishing occur along the stream. The canyon provides a sense of remoteness and offers relief from the nearby congested and crowded

recreation areas.

Geology The geology of Willow Spring Canyon is composed of exposed Coconino

> Sandstone with a Kaibab Limestone cap. Once an ocean floor, the area that is now the Mogollon Rim has gone through many changes. A fault in this area caused tremendous uplifting, raising the ground to an average

elevation of 7,500 feet.

Fish Native speckled dace and non-native brown and brook trout are found in

the river.

Wildlife Suitable habitat is present for the threatened Mexican spotted owl and the

sensitive bald eagle and northern goshawk. The sensitive northern leopard

frog historically occurred in the area.

Numerous other wildlife species, including elk, mule deer, whitetail deer, black bear, mountain lion, coyote, great horned owl, osprey, and passerine birds, live in or use this river segment for at least part of their life cycle.

**Historic** There are no known historic resources. **Prehistoric** Isolated hunting camps and rock art from the Mogollon culture are very

rare because the high elevation was not suitable for permanent living.

Hydrology Stream flow is mostly ephemeral with the largest flows in early spring.

> Other reaches are intermittent with perennial pools. Water quality surveys in the early 1990s indicated very low turbidity levels. Flow in Willow

Springs Creek is mostly from a leak in Willow Springs Dam.

Vegetation Dominant species along the river segment include ponderosa pine and

narrowleaf cottonwood with other woody and herbaceous species.

**Land Ownership** All national forest.

**Transportation** Numerous old logging roads provide access to the top of Willow Springs

Canyon.

**Livestock Grazing** Willow Springs Canyon is within the Long Tom Allotment. Sheep are

herded to avoid the canyon, but may cross the canyon below Willow

Springs Dam at least once during the grazing season.

**Past Activities** Horse logging occurred over 80 years ago in the upper portions of Willow

Creek Canyon.

**Special Land Uses** None.

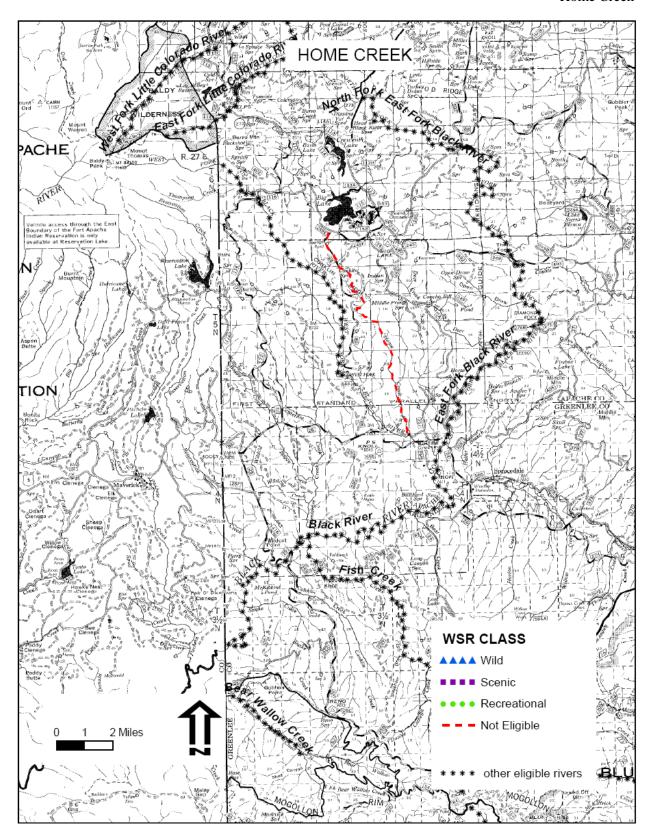
**Special Management** 

This river segment is within the Rim Lakes Recreation Management Area **Designations** 

and is closed to motorized travel. The northern one-third of the river

segment is in Chevelon Canyon Inventoried Roadless Area.

Other The river segment is two hours from the Phoenix area. This page intentionally left blank.



### Home Creek

Is the River free flowing?

Yes or No

No

Area of Comparison Statewide

Potential Outstandingly Remarkable Values

No Outstandingly Remarkable Values (ORV), no longer eligible

Eligible Segment None

Classification and Length None

Changes from previous

documents

Home Creek is no longer eligible because it is not free-flowing. Two dirt, gabion, and concrete fish barriers were constructed across it. It is no longer flowing in a natural condition and the gabion and concrete structures have modified the waterway. Other river-related values are

neither unique nor outstanding.

**Location** Home Creek arises just south of the Big Lake Recreation Area in section

32, T06N, R28E. It flows south for approximately 10 miles to the

confluence with the West Fork Black River.

**Districts** Springerville, Alpine

County Apache

Legal Description Township/Range: T04N, R28E; T05N, R28E; T06N, R28E; Gila and

Salt River Meridian

#### **River-related Resources**

**Scenery** Home Creek flows from a rolling grassland area. The diversity of plants

and wildlife creates enjoyable views for the hikers, fishermen, and bicyclists who use the area. The alpine meadows and spruce and Douglas-fir stands provide cool temperatures for hiking and camping. Where Home Creek meets the West Fork Black River, the canyon opens out into a large

meadow.

**Recreation** Dispersed camping occurs at Conklin Spring and along Conklin Ridge.

Horseback riding, hunting, and fishing are also popular activities.

**Geology** The geology of the stream is volcanic in origin. Basalt and andesite from

the Datil Formation were deposited in large lava flows during the Quaternary and Tertiary periods. Between episodes of volcanic activity,

sedimentary deposits, including sand and gravel, were formed.

**Fish** Threatened fish species include Apache trout. The Apache trout is both the

native and sport fish indicator species. They live where water flows year round or collects in pools. Other native fish species include speckled dace.

Wildlife Sensitive wildlife species include bald eagle and northern goshawk. The

Mexican gray wolf has dispersed into the river area from its reintroduction

site.

The variety of wildlife habitats provides for diversity and abundance of wildlife species along the river segment. Numerous raptor nesting sites, including osprey, are found along the river canyon. Where Home Creek and West Fork Black River meet, the canyon opens out into a large

meadow, which elk and deer use heavily.

Historic The state-owned PS Ranch at the confluence of Home Creek and the West

Fork Black River has a cabin and some corrals.

**Prehistoric** One prehistoric site has been recorded along the river segment.

**Hydrology** Home Creek is mostly perennial, with some intermittent reaches. Two dirt,

gabion, and concrete fish barriers were constructed on Home Creek in the late 1990s, one of which creates a seasonal impoundment of at least 2

acres.

**Vegetation** Sensitive plant species near the creek include Goodding's onion.

The surrounding landscape is dominated by mixed conifer (Douglas-fir, white fir, and blue spruce) at the higher elevations and ponderosa pine at the lower elevations. Vegetation along the river segment consists of alpine

meadows, mixed conifer forest, ponderosa pine, alder, and willow.

**Land Ownership** Predominantly national forest, with 1 percent state (14 acres).

**Transportation** Vehicle access to the river segment is from Forest Road 68, which parallels

the river segment from the headwaters to Conklin Spring and from various small logging roads. Forest Road 8944 crosses the south end of the river segment at the PS Ranch. The Indian Springs Connector Trail #627B, between Indian Springs Trail #627 and West Fork Black River Trail #628, crosses the river segment just above Conklin Spring. The West Fork and

Indian Springs Trails are hiking and bicycling trails.

**Livestock Grazing** The three grazing allotments along Home Creek include Burro Creek, PS,

and Grandfather.

Past Activities Six timber stands along the river segment were harvested in the early

1990s.

**Special Land Uses** There are a well and sewage treatment facility east of the headwaters.

Special Management Designation

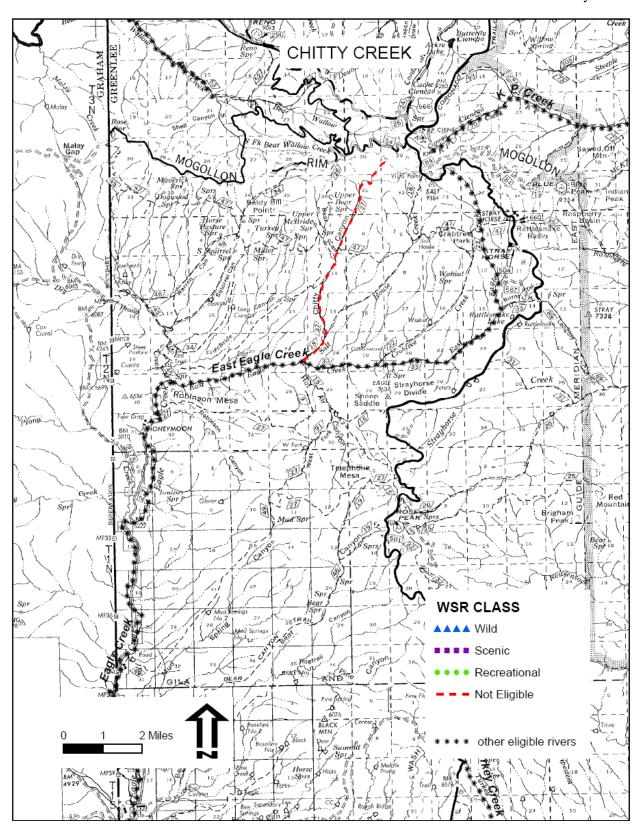
The southernmost ¾ miles of Home Creek are in the West Fork Black River Special Management Area, where motorized vehicle use is restricted.

Other Local users are from Eagar, Springerville, St Johns, Alpine, Show Low,

Pinetop-Lakeside, and other small towns. Regional users are from Tucson

and Phoenix.

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## Chitty Creek

Is the River free flowing?

Yes or No

Yes

Area of Comparison Statewide

Potential Outstandingly Remarkable Values

No Outstandingly Remarkable Values (ORV), no longer eligible

Eligible Segments None

Classification and Length None

**Changes from previous** 

documents

Chitty Creek no longer has any ORVs because in 2007 a 1,000-year flood scoured the channel, removed the riparian vegetation and habitats,

and filled the waterfall.

**Location** The headwaters of Chitty Creek start high on the edge of the Mogollon

Rim. It then flows south past Upper Bear Springs to Salt House Creek.

District Clifton

County Greenlee

Legal Description Township/Range: T02N, R28E; T02N, R29E; T03NS, R29E; Gila and

Salt River Meridian

#### **River-related Resources**

Scenery The maples, shrubs, and cottonwoods provided a spectacular fall display of

colors. In other seasons the variety of vegetation textures and colors along the stream created pleasing views. A highlight of the creek was Chitty Falls, a 15-foot waterfall. This was the main destination of hikers and

packers.

**Recreation** Recreation opportunities included hiking, hunting, horseback riding, bird

watching, and some camping. There was a great variety of wildlife and

birds for viewing. Recreation use was low.

**Geology** The southern portion of the river segment includes of fossil-bearing river

and lake deposits of middle or early Pliocene age within the present

drainage system and related conglomerate, sand, silt and clay. The northern

portion includes irregularly-shaped lava flows. These rocks consist

essentially of dark-colored, fine-grained, vesicular basalt and andesite with interbedded sediments and tuff. The older volcanic rocks, basalt and andesite, are extensively eroded. The rock layers may be inclined at varying angles due to block faulting and tilting. Locally, the lava rock

surfaces may be decomposed into a sticky, plastic clay.

Fish Trout taken from this stream were identified as Gila/Rainbow hybrids.

Chitty Creek was identified as a potential Gila trout reintroduction stream,

but that habitat no longer exists.

Wildlife Sensitive wildlife species along Chitty Creek included narrow-headed

gartersnake, northern leopard frog, lowland leopard frog, and northern goshawk. Chitty Creek is within the Mexican gray wolf primary recovery

zone.

The uplands around Chitty Creek provide habitat for mule deer, white-tailed deer, elk, javelina, sharp-shinned hawk, turkey, Montezuma quail,

coyote, occult little brown bat, black bear, and mountain lion.

Historic Much of Chitty Creek has been surveyed. A historic livestock corral was

identified along lower Chitty Creek.

**Prehistoric** Much of Chitty Creek has been surveyed. A precontact room block has

been found along lower Chitty Creek.

**Hydrology** Chitty Creek is now intermittent and becomes ephemeral near Salt House

Canyon.

**Vegetation** Sensitive plant species include *Wislizeni* gentian.

Vegetation along Chitty Creek included an overstory of Rocky Mountain maple, narrowleaf cottonwood, Arizona walnut, alder, and boxelder. There were also some old-growth cottonwood galleries. Shrub understory species included scarlet sumac, young juniper, birchleaf buckthorn, and Gambel oak. Terraces along the creek support ponderosa pine, narrowleaf

cottonwood, Arizona walnut, and Gambel oak. The surrounding uplands support ponderosa pine, piñon pine, juniper, and a variety of shrub species. Canyon stringers consist of ponderosa pine and scattered pockets of mixed conifer at the higher elevations. There was a 10-acre riparian exclosure 1 mile below the Chitty Falls (last maintained in 1993 and destroyed in

2007).

Land Ownership All national forest.

**Transportation** Chitty Creek is accessed by several trails. Chitty Trail #37 parallels almost

all of Chitty Creek. The M-C Trail #462 leaves Chitty Creek to the west below Chitty Falls. The Highline Trail #47 crosses Chitty Creek above Chitty Falls. The Salt House Trail #18 parallels the lower river segment from the confluence of Chitty and Salt House Creeks to East Eagle Creek. East Eagle Trail #33 is also provides access to Chitty Creek. The Eagle National Recreation Trail follows the river segment for approximately 3 miles from East Eagle Creek to the Highline Trail. (Chitty Creek Trail was

washed away in 2007.)

**Livestock Grazing** Chitty Creek is in the East Eagle Allotment.

Past Activities None.

Special Land Uses None.

Special Management Designations

The Eagle National Recreation Trail follows the river segment for approximately 3 miles. Chitty Creek is within Salt House Inventoried

Roadless Area.

Other

Local users are from Safford, Duncan, Clifton, and Morenci, Arizona, and Glenwood and Reserve, New Mexico. Regional users are from Tucson and Phoenix. Chitty Creek is known nationally because of the Eagle National Recreation Trail.